JULY 1956
VOL. V No. 5

TAXON

Official News Bulletin of the International Association for Plant Taxonomy, Edited and Published for I.A.P.T. by the International Bureau for Plant Taxonomy and Nomenclature, 106 Lange Nieuwstraat, Utrecht, Netherlands

NOMENCLATURAL CONSERVATION IN THE PHANEROGAMS

by

F. A. Stafleu (Utrecht)

> "*. . . . justice, whose name in science is priority, is at a discount here, ...*" E. L. Greene, 1892.

The list of conserved and rejected generic names of Phanerogams has steadily grown since its by no means modest beginning in 1905. The spiritual fathers of the list, the Berlin botanists associated with Adolph Engler, cannot have foreseen its enormous growth. The 1905 list contained 405 conserved names of genera of Phanerogams, the 1952 list already contains circa 800 names. There is no doubt that many are still to be added, because the new and thorough revision of the literature made necessary by the compilation of the *Index Nominum Genericorum* (I.N.G.) is due to produce many unpleasant surprises. The Paris Botanical Congress rejected a proposal to close the list: without doubt the main reason for this rejection was that the work on the I.N.G. was only beginning.

A further reason why the lists are still growing is that more and more proposals are made to conserve names of genera which are well-known only to their monographers or to regional specialists but are only of limited application. This is a dangerous trend because it is not generally realized how much work is involved in the handling of one single proposal and how limited our resources are to cope with these problems. A great many of the proposals for conservation made before the Stockholm Congress have been rejected: 59 out of 123 proposals were rejected, whereas 12 proposals are still under consideration by the Committee for Spermatophyta. This Committee may not be infallible; nevertheless this high number of rejections shows that many proposals have been made light-heartedly. The result is that proposals of prime importance, those which aim at the conservation of really important names used in hundreds of textbooks and floras, have to wait several years before being adopted.

A thorough checking of the present list, made necessary on the one hand by the preparation of the new edition of the Code (the "*Paris Code*") and on the other hand by the requirements of the *Index Nominum Genericorum*, has revealed that it is in many respects in need of revision. I have started to check the references and to reconsider many cases in the light of the developments of nomenclature since the Vienna Congress. It is of course impossible for one person to study all cases as thoroughly as new ones should be treated. Still, checking has proved to be useful; in the course of the half century of its existence many mistakes have crept into the list and many cases have got an entirely new aspect on account of the development of nomenclatural legislation (the type-method!). Also it has become clear that in the past a certain number of proposals, and alas not a very small one, have been made

and accepted without consultation of the original literature. There is no doubt that under our present organisation it is practically impossible for a proposal to pass the committee without such a consultation; I am not sure, however, that all proposals made before the Stockholm Congress had been thoroughly checked in this respect by their authors. This and the fact that many proposals have been made without an adequate knowledge of the rules of nomenclature has caused an entirely unnecessary strain upon the Nomenclature Committees and again a readily understandable delay in the treatment of the really important ones.

Notes on the History of the List.

When Otto Kuntze published his *Revisio Generum Plantarum* in 1891 he announced that by a strict application of the 1867 *Lois de la Nomenclature Botanique*, he had been obliged to change 1074 generic names (and, incidentally, about 30.000 specific names). Kuntze took 1735 (Linnaeus, *Syst. Nat.* ed. 1) as the starting point for the priority of generic names. Furthermore he checked the older literature thoroughly with the disastrous result mentioned above. The history is well-known: A storm of protests against this formidable but nevertheless "rücksichtlose" work sprang up and it was mainly the well-known "Berlin School" with eminent botanists like Ascherson, Engler, Schumann, and Urban to the fore, that at once answered this challenge by putting forward a proposal to conserve 81 well-known generic names (Ber. Deut. Bot. Ges. 10 : 327. 1892). This was accompanied by a definite proposal to take 1752 (*Gen. Pl.* ed. 4) as the starting point for the nomenclature of generic names. The 1867 *Lois* were too vague on this matter:

"Art. 15. Chaque groupe naturel de végétaux ne peut porter dans la science qu'une seule désignation valable, savoir la plus ancienne, adoptée par Linné ou donnée par lui ou après lui, à la condition qu'elle soit conforme aux règles essentielles de la nomenclature".

In his *Nouvelles Remarques* from 1883, Alph. De Candolle himself states that 1737 (*Gen. Pl.* ed. 1) should be taken as the starting point for generic names. Otto Kuntze was allowed, under the 1867 rules, to take 1735 as the starting-point !

This is not the place to explain again the disputed basic principles of Kuntze: the proposal to establish lists of *nomina generica conservanda* was but one of the measures taken to stem the flood of his name-changes. The Vienna Congress (1905) decided to accept the principle of conserving generic names; at the same time the Congress adopted the list prepared by Harms in 1904 and published in the "Texte Synoptique" of the Congress. Already, this list contained 405 conserved names! It was much better documented than the much smaller Ascherson list of 1892 but the arguments for the conservations have never been published. It is probable that nearly all references were taken directly from Dalla Torre et Harms, *Genera Siphonogamarum* (then published up to about no. 8480) and that all citations, even when erroneous, were simply reproduced. There is no doubt that the *Genera Siphonogamarum* was, and is, an extremely useful book and a formidable achievement, but Harms himself used to declare in later years that it contained "ten thousand errors"! Some of these ten thousand errors have been reproduced again and again. From the repetition of such mistakes by other authors of proposals we may conclude that the original literature has not been consulted.

The Bruxelles Congress of 1910 adopted lists of generic names of algae and a further number of names of phanerogamic genera.

Many new proposals for conservation were submitted to the Cambridge Congress (1930) but the most important decision then taken was that "the application of

conserved names is determined by nomenclatural types, or by substitute-types where necessary or desirable". The third edition of the Rules (1935) contained a list of type species of names that had already been conserved. This list appears there (p. 143) as a proposal, reproduced literally from the original publication (M.L. Green, Prop. Brit. Bot. 97. 1929). The reasons for selecting those type species were explained in a mimeographed foolscap-size circular (Kew, 1926) consisting of 70 pages which was circulated among botanists and botanical institutions before and at the Cambridge Congress. Dr Sprague informs me that this list was not considered by the Special Committee for Phanerogamae and Pteridophyta established at the Amsterdam Congress (1935), owing to the interruption of international communications. In the next (unofficial) edition of the Rules, the *Brittonia-edition (Brittonia 6* : 1-120. 1947, ed. by W. H. Camp, H. W. Rickett and C. A. Weatherby) these type species have been inserted in the main text, although there was a footnote on p. 47 stressing their exact status.

In the Stockholm Code (1952) we have again reproduced these unofficial type-species, this time alas without an explanatory note. Still it should be pointed out that the choice of these type-species is not an official one and that, wherever we come across a choice that cannot be maintained, the *Committee for Spermatophyta* have full powers to correct the situation.

The rejected names have not yet been typified. This may seem to be unimportant: those names have been rejected and should not be taken into consideration. Still it depends entirely upon their status how they are going to be rejected (absolutely or relatively), and often the exact status can only be seen from the type-species. Typification of rejected names is, therefore, desirable (under Art. 14 (24)*), note 2 it is of course practically obligatory!).

At present the situation is the following: Proposals for the conservation of generic names are submitted to the *General Committee*, i.e. to its ex officio chairman, the *Rapporteur-Général*. The Rapporteur has been authorized (by tradition) by the *General Committee* to submit these proposals immediately to the nomenclature committees for the various groups. This is done by publication in *Taxon*. The special committee concerned (no longer termed "special" however, since the Paris Congress) studies the proposal and publishes a report with a recommendation in *Taxon*. This publication means that the proposal is again submitted both to the *General Committee* and also to the scrutiny of all other botanists. Everyone can send his objections to the *General Committee* before a certain date and, when no objections have been raised either by the committee or by other botanists, the proposal is adopted as from that date. The generic name concerned then has the status outlined in Article 15 (25) of the Code: botanists are authorized to retain it pending the decision of a later *International Botanical Congress*.

The procedure seems somewhat lengthy but it has the advantage of leaving open every opportunity for serious opposition. This may for instance be necessary in a case where an earlier homonym proposed for rejection applies to a cryptogamic group whereas the name to be conserved is one for a taxon of phanerogams.

The history of our list has not yet come to its end. Time and again new cases are discovered and new additions seem necessary. Many of these are due to the large scale checking of the original literature in connection with the *Index Nominum Genericorum*. Others are caused by the development of Nomenclature since 1905 and by the fact that the application of the type method to all conserved and rejected

*) The numbers of the Articles refer to the new edition of the Code (1956); the equivalents of the new numbers in the Stockholm Code are given in parentheses.

names has not yet been completed. Last, but not least, I should mention the modern trend to fix the exact dates of publication of various older publications. This laborious task has for the greater part been undertaken by Mr W. T. Stearn of London and Mrs van Steenis-Kruseman of Leiden. Many curious discoveries have been made and several conservations can be shown to be superfluous in the light of this refined bibliographic knowledge.

As a last note on the history of the list the work done by T. A. Sprague to eliminate errors and inconsistencies should be mentioned. He checked many of the older entries and found a great number of cases of unnecessary conservation. The daggers and asterisks in the lists in the Stockholm and Brittonia editions mark in a very eloquent way his great and energetic attempts to bring this publication up to date. The editors of the Brittonia edition too did much towards a unification of the list. That there is still much to do is certainly not their fault; the list has grown to such proportions that a continuous effort by many more botanists is needed to put it into good order. In this respect reference should be made to the important article by Mansfeld in *Taxon* (2 : 187. 1953) which certainly gives some good directions for making a further improvement.

Rejected names.

The *nomina rejicienda* hardly have an official standing under the present Code; we all know what they are but their status could be more definitely outlined.

In the *Cambridge Rules* (1935) we find in Art. 21 under no. 2 the statement (cited above) that the "application of conserved names is determined by nomenclatural types", but it is only in the *Stockholm Code* (1952) that we find that "the application of both conserved and rejected names is determined by nomenclatural types". In note 3 of both editions we find the statement that "a conserved name is conserved against all other names for the taxon (Cambridge: "group") whether these are used in the corresponding list of rejected names or not, ...".

There are no further references in the text of the Code to the rejected names and to the list of these names in Appendix III (V) (1952).

Rejected names may be:

1. *Earlier homonyms*
2. *Earlier nomenclatural synonyms*
3. *Earlier taxonomic synonyms*

It should first be pointed out that the mentioning of later homonyms or synonyms is not necessary from a nomenclatural standpoint. Our lists do not aim at citing all the homonyms and synonyms of a name as would be done in a monograph. Furthermore, in future we shall have the *Index Nominum Genericorum* that will give a great part of this information.

It is easy to understand why such later names have been cited: in some publications they had already been substituted for the conserved names, but this seems to be no reason for lengthening the list.

Homonyms

Before the Cambridge Congress "No one was authorized to reject a name .... because of the existence of an earlier homonym which (was) universally regarded as non-valid" (*Int. Rules*, Bruxelles, ed. 2, Art. 50). Because of the not very clear way in which this Article was worded, it became universal practice to retain also later homonyms when the corresponding earlier ones were commonly treated as synonyms on taxonomic grounds. Strictly speaking the only earlier homonyms which should not have been obstacles towards the use of later homonyms were those that were

illegitimate under the rules and certainly not those which were simply not correct because of a certain taxonomic view. A name that is not correct is not necessarily illegitimate!

At Cambridge, however, canon 16 of the *American Code* (1904): "a name is rejected when preoccupied (homonym)" was generally accepted and this meant that a great number of well-known names that had been admissible ("legitimate" in the modern sense, "valid" under the *Vienna Code*) under the Vienna-Bruxelles rules became illegitimate because of the existence of earlier homonyms. Most of these earlier homonyms were themselves illegitimate, and it has been argued by some that this decision was in striking contrast with the prescription to avoid all useless creation of names!

This "absolute" homonym rule had been adopted on the understanding that well-known later homonyms would be conserved as far as possible. A. Rehder, C. A. Weatherby, R. Mansfeld, and M. L. Green made a systematic search for later homonyms, using as a basis Dalla Torre and Harms and the *Index Kewensis*. In an impressive publication in the *Kew Bulletin* of 1935 (p. 341-544) these authors discussed a great many cases and submitted numerous proposals for conservation. The names had been dealt with in an alphabetical order; the cases dealing with later homonyms contained in the letters D-K were to be published at a later date. As far as I know, this part of the work has never been published. This omission and the circumstance that it was also obviously impossible to include those homonyms that were not listed in Dalla Torre & Harms and the *Index Kewensis* are the causes why homonyms are still being discovered, especially in connection with the work on the *Index Nominum Genericorum*.

The proper typification of the rejected homonyms is of importance because of the existence of orthographically different homonyms, that is of names, based on different types, that are so similar that under Art. 75 (82) they are to be treated as orthographic variants of the same name.

Earlier Nomenclatural Synonyms

When the *nomina rejicienda* in our lists have been properly typified, as far as possible, it will be clear whether a name is a nomenclatural or a taxonomic synonym of the conserved name. To assist in this it will be convenient to cite whenever necessary the basionyms of the names of the type-species. Nomenclatural synonyms can on no account be used any more: their rejection is *absolute*. This is not the case with earlier taxonomic synonyms.

Earlier Taxonomic Synonyms

Art. 14 (24) note 3 of the Code reads: "A conserved name is conserved against all other names for the taxon whether these are cited in the corresponding list of rejected names or not, so long as the taxon concerned is not united with another one bearing a legitimate name. In the event of union with another taxon, the earlier of the two competing names is adopted in accordance with Art. 57 (67).".

In the case of *Micromelum* Blume (1825) (T.: *M. pubescens* Blume) we have an example of a conservation of a name against a name based on a different type, viz. *Aulacia* Loureiro 1790 (T.: *A. falcata* Loureiro): as soon as a taxonomist is of the opinion that the two type-species belong to different genera, he is fully authorized to use the name *Aulacia* Loureiro. (See the *Luzuriaga* example in the Code). The rejection of *Aulacia* is only *relative*.

Note 3 is not clear in this respect, neither are the other parts of the article with the exception of the examples. These show that when a taxonomic synonym, listed as

a nomen rejiciendum, is regarded as the name of a separate taxon, it is no longer to be regarded as an "other name for the taxon", hence note 3 does not apply and the name can be used. This will be expressed by a new note (4) in Art. 14 (24) of the Paris Code reading: "When a name has been conserved against an earlier synonym, the latter is to be restored, subject to Art. 11 (16), if it is considered the name of a genus distinct from that of the *nomen conservandum*". (*Luzuriaga* example).

It might be argued that "all other names for *the taxon*" (italics mine) means all other names based on the same type (nomenclatural synonyms). This, however, would be a conclusion that ignored the historical development of nomenclatural conservation.

The intention is to conserve the name against all nomenclatural synonyms as well as against all taxonomic synonyms which fall within the circumscription for which the generic name is conserved. It has never been the intention to conserve against earlier legitimate names that become synonyms only as a result of a wider view of the circumscription of the genus concerned. This situation is not at all clear from the Article and its notes and emerges only from the examples.

Under the Vienna-Bruxelles Rules lists were provided of "names which must be retained *in all cases*", so-called nomina *utique* conservanda. Such names were protected against all homonyms and synonyms whether nomenclatural or taxonomic. This meant that if e.g. the genus *Weihea* Sprengel (1825) was united with *Cassipourea* Aublet (1777) the combined genus would bear the conserved name *Weihea*. This was an unforeseen and undesirable consequence of the Vienna-Bruxelles Rules because it had of course been the intention to conserve only the use of the name *Weihea* in a certain circumscription (excluding the type species of *Cassipourea*).

Circumscriptions, however, are not to be defined and it may quite well be that there are as many circumscriptions as there are authors dealing with the genus.

At the Cambridge Congress it was thought to avoid this difficulty by changing the pertinent sentence to: "names which must be retained *as exceptions*", *nomina conservanda*, not nomina *utique* conservanda.

The too rigourous system was dropped and it became possible again to retain *Cassipourea* in the event of its union with *Weihea*. Note 3 was added in which it was explained that a conserved name was conserved against all other names for "*the taxon*" with the additional proviso: "whether these are cited in the corresponding list of rejected names or not, so long as the taxon concerned is not united with another one bearing a legitimate name." It was intended by this note that names should be conserved against unlisted taxonomic synonyms which fall within the circumscription for which the name is conserved, but not against earlier legitimate names which only become taxonomic synonyms as a result of the adoption of a wider circumscription. Under the Code, however, we deal with names and types, but not with circumscriptions, and a rule expressing the intention of Note 3 that can be applied unequivocally in all cases cannot be drawn up.

In practice this difficulty has been solved by listing as *nomina rejicienda* those taxonomic synonyms which should be rejected, and by leaving out those names (like *Cassipourea*) which should be retained in the event of union with a conserved name.

The only system which will work unequivocally in practice is to provide thus:

"In the event of union with another taxon, the earlier of the two competing names is adopted in accordance with Art. 57 (67), *unless this name is listed as a nomen rejiciendum (for that particular case)*."

The status of an earlier legitimate taxonomic synonym would then be one of two kinds:

a) *listed* and therefore to be *rejected only* in the event of union of the two taxa (*Micromelum-Aulacia*).

or b) *not listed* and therefore to be *retained* even in the event of union with a conserved name (*Weihea-Cassipourea*).

For these reasons it is regrettable that Art. 14 (24) does not explicitly mention the existence of the various kinds of rejected names and definitely fix their status! This can certainly be deduced from the present text, but the way in which the notes now circumscribe the nature of what the main text calls "names which must be retained as exceptions" is not clear enough.

Under the unequivocal system mentioned above, the conservation of a name would not by itself protect it against falling into the synonymy of any obscure earlier name that might be discovered at a later date; this protection would hold only against earlier legitimate nomenclatural synonyms and earlier homonyms; as far as earlier legitimate taxonomic synonyms were concerned, the conservation would hold only against those actually listed as *nomina rejicienda.*

It is hardly necessary to point out that such undesirable earlier taxonomic synonyms, when discovered, should be listed as soon as possible as *nomina rejicienda.* This holds out for those synonyms which fall clearly within the original circumscription for which the name of the genus was conserved. It might be useful to consider the insertion of a statement to this effect in a future edition of the Code.

It seems desirable to indicate exactly in future to what category the listed rejected names belong. The most elegant way will be to cite as far as possible the type-species of these names (Art. 14 (24), note 2). Synonyms for which no type-species can yet be given will all be treated as taxonomic ones. Some of them may, when later provided with a lectotype, become nomenclatural ones.

Superfluous Nomina Conservanda

Under this title T. A. Sprague published a short article in the Journal of Botany (62 : 143-145. 1924) which begins with the following lines:

"The list of *nomina conservanda* adopted by the Vienna Congress (1905) was prepared by Dr Harms in 1904. It does not seem to have occurred to anyone that a list of exceptions to Rules, drawn up before the Rules themselves had been fixed, might possibly require revision. At all events, the list was not revised, and it includes numerous *nomina conservanda* which are wholly superfluous, since they would in any case be adopted under the International Rules. This is due to the fact that for one reason or another, the corresponding *nomina rejicienda* are invalid".*)

Dr Sprague gives some examples and appends a list of thirty-two superfluous *nomina conservanda* most of which have been marked with a dagger (†) in the *Brittonia edition* and in the *Stockholm Code.* He concludes his remarks by saying: "Further superfluous names will doubtless come to light in the future".

The editors of the *Brittonia edition* as well as Dr. Sprague himself have since had occasion to bring about some more corrections, but Sprague's concluding statement is still valid.

Before giving a few types of superfluous *nomina conservanda,* I should like to discuss one or two special questions with a bearing on such cases.

Patric Browne's "Civil and Natural History of Jamaica" (ed. 1, 1756) has given rise to some controversy. A. B. Rendle (*Journ. of Bot.* 50: 129. 1912) states that his genera are not effectively published "since Browne's descriptions are of species only". Van Steenis (*Flora Malesiana* 4(5): clxxiv. 1954) has already pointed out that Browne's generic names are perfectly validly published as far as they were applied to monotypic genera. Under Art. 41 (50) of the Code such publications

*) invalid in the old sense: illegitimate under the recent Code.

are valid. This provision dates from the *Cambridge Rules* only (1935) and this is why Rendle as well as Sprague (l.c. 1924) rejected the monotypic names published by P. Browne.

P. Browne did not adopt the Linnean system of binary ('binomial') nomenclature but he duly recognized genera and species, the latter indicated by numbers. There is therefore no objection against his publication of monotypic new genera. But furthermore, Mr W. T. Stearn has drawn my attention to the fact that Browne also duly published generic diagnoses of those genera that were *not* monotypic. In general he published his — long and detailed — generic diagnoses under the specific diagnosis of the first species of his new genus. There is actually a marked difference in the typography, and there seems to be no doubt that these entries constitute his generic diagnoses. This means that even the names of his new genera that were not monotypic were validly published in 1756. This greatly eases the application of some of his well-known names and takes away the necessity of conservation. In several cases Browne's names were considered as first validly published by Linnaeus in 1759 (*Syst. Nat.* ed. 10); these few years of difference were just sufficient to let some of them fall into synonymy.

Seven of P. Browne's names are listed as conserved in the Stockholm Code (several of them superfluous) but not less than 33 of his names are rejected because of the neglect of his work that led to the general acceptance of later names.

Another point of dispute is that of the status of Necker's names although these names have hitherto been generally accepted. Necker used the term *species naturales* for our genera, and *proles* for our species. There seems to be no doubt, however, as to their exact rank because Necker consistently associates his *species naturales* with the genera of other botanists, and the *proles* with the species of others. Six of his names have been conserved (44 rejected) and others too are generally used. Still, because of uncertainty as to how the rules should be applied in this case, the *Editorial Committee* has requested the *Committee for Spermatophyta* to study it and to express an opinion.

* * *

The conservation of generic names may be superfluous in the following instances:

1. The synonym against which the name has been conserved may be illegitimate under the Code or may even not be validly published at all. Names published in synonymy, nomina nuda, later homonyms, vernacular names, provisional names, names published as epithets for subgenera and sections, etc., etc., do not, of course, need to be taken into account. Examples could be given of conservation of names against all those types of names not validly published or illegitimate; they are to be found in Sprague's publication of 1924 and they will be encountered in the other instalments of this series of articles.

2. The corresponding rejected earlier homonyms may not be validly published. Earlier homonyms have to be taken into account whether they are legitimate or not but they have no standing when they have not been validly published. The name *Donatia* Loefling 1758, for instance, was published as a synonym of *Bontia* L. 1753, and the publication is not valid. The conservation of *Donatia* J. R. et G. Forster 1776 (no. 3204) is therefore unnecessary, unless, of course, the publication of the name *Donatia* Loefling was validated between 1758 and 1776.

3. The conserved name may prove to have been validly published by an earlier author with the same type-species at a date before that of the rejected name. Hylander has given some examples of this in the Synopsis of Proposals submitted

to the Stockholm Congress, p. 39-40. 1950. The names originally published by P. Browne belong to this category: several of them have been conserved as having been published by later authors on the erroneous assumption that none of Browne's generic names were validly published; *Iresine* P. Browne (no. 2339) and *Zeugites* P. Browne (no. 358) are examples.

4. The exact date of publication of the conserved or rejected name may prove to be different from that given on the original title-page. For example, several names have been conserved against names of Rafinesque published in his *Flora Telluriana* on the assumption that this publication really dates from 1836 as indicated on the title page. Barnhart (*Torreya* 7: 176-182. 1907) has shown that parts 1-3 were published in 1837 and part 4 in 1838. This difference may just make the conservation unnecessary, e.g. for no. 1778, *Miltonia* Lindley (1837) against *Gynizodon* Raf 1838 (not 1836).

The question of the exact dates of publication in so far as they differ from the "official ones" given on the title-pages is a very serious one. A discussion of this problem will be found in the article by W. T. Stearn and M. J. van Steenis-Kruseman in *Flora Malesiana* 4(5): clxiii. 1954. This field is still to be further explored and some sort of a decision will have to be taken to avoid this exploration becoming another major source of instability for our commonly accepted names.

5. The correct typification of the rejected name may prove that the conserved name is not congeneric with the rejected name. In some cases the rejected name can be shown to apply to a taxon of an entirely different family! In other cases the same name has been listed as *pro parte* against two entirely different generic names. An example is the conservation *Rhaphiolepis* Lindley 1820 (no. 3339) of the *Rosaceae* against *Opa* Loureiro 1790. Merrill (*Trans. Am. Phil. Soc.* ser. 2. 24: 286. 1935) has shown that the type of *Opa* is a species of *Eugenia* (*Myrtaceae*).

It is clear that under a strict application of the type method the citation should be deleted where the *pro parte* does not include the type species. The use of such expressions as *pro parte* and *emendavit* should be avoided in the lists; in this case they are superfluous remains from the days before the Cambridge Congress.

6. The conservation may have been made against a name with only a slightly different spelling but which is wrongly considered to be a homonym (*Skimmia* Thunberg — of the *Rutaceae* versus *Skimmi* Adanson of the *Illiciaceae*, formerly *Magnoliaceae)*.

7. The conservation of one name may cause that of another name to be superfluous. The conservation of *Armeria* Willd. and *Limonium* Miller gives an example of such a situation because their application depends on the typification of the Linnean genus *Statice*. The conservation of *Armeria* Willd. means that *S. armeria* L. is regarded as the type-species (choice by Miller, 1754) of *Statice* L. The conservation of *Limonium* Miller 1754 means that *S. limonium* L. is regarded as the type-species (choice made by Willdenow, 1809). In either case the result is that the name *Statice* L. can no longer be used, but only one of the two conservations is needed. Miller's choice obviously has priority and *Limonium* Miller is legitimate without conservation.

Acidoton P. Browne 1756 is rejected against the later homonym *Acidoton* Swartz 1788 *(nom. cons.)*. This means that P. Browne's name is now illegitimate and the conservation of its later synonym *Securinega* A. L. Jussieu 1789 (no. 4297) is therefore superfluous. *Securinega* A. L. Jussieu is a *taxonomic* synonym of *Acidoton* P. Browne and it is, therefore, perfectly legitimate. If it had been a *nomenclatural* synonym of *Acidoton* P. Browne, the conservation would still have been necessary because then *Securinega* would have been a superfluous name on publication. It is

for this reason that the conservation of *Xylosma* G. Forster 1786 over *Myroxylon* J. R. et G. Forster 1776 has to be retained, notwithstanding the fact that *Myroxylon* J. R. et G. Forster has been rejected against *Myroxylon* Linnaeus f. 1781; *Xylosma* was a superfluous name when published and therefore illegitimate under Art. 64 (73) (1) of the Code.

Errors and Mistakes.

When checking the entries in the list of conserved and rejected names against the original publications it becomes clear that in the course of its growth from 1905 until 1952 quite a number of errors and mistakes have crept in. Apart from that it becomes clear that the authors of the proposals have in some instances not checked their own data against the original literature. It seems superfluous to enumerate here all the kinds of mistakes and errors that may be encountered in the list. A few categories may perhaps be mentioned since they are of some interest.

1. There are quite several technical errors: misquotations, errors in citation of volume or page numbers, etc. These mistakes may, I think, be corrected by the editors of the Code without further study by the nomenclature committees.

2. The spelling of the conserved name given in the original publication is sometimes different from that in the list. (This does not apply of course to those cases where a changed spelling has been conserved). Examples of such differences are *Vriesea* Lindley 1843 (no. 891) which is really spelled *Vriesia* in the publication cited in the Code (see L. B. Smith in Taxon 4: 179. 1955) and *Pigafetta* Beccari 1877 (no. 567) which was really spelled *Pigafettia*. Such cases have to be studied again by the Committee (This does not apply to cases like *Clianthus* (3753) wrongly spelled *Cilianthus* in the Stockholm edition only). It is not always clear what was the real intent: conservation of the spelling as given in the Code or conservation of the original spelling.

3. The original publication of a conserved name has proved to be not valid in some cases. It is quite possible to conserve illegitimate names, but it is impossible to conserve names that do not exist nomenclaturally. In such instances it is necessary to conserve the name as of the first subsequent author who gave it valid publication. Forskål did not give a generic diagnosis for his *Suaeda* in 1775; there are seven diagnoses of species only and the publication is not valid. It is probable that Scopoli 1777 (*Intr.* p. 333) was the first author to publish a generic diagnosis of the genus and that the genus should be cited as *Suaeda* Forskål ex Scopoli 1777.

4. In his remarks on the list of *nomina generica conservanda* R. Mansfeld (*Taxon* 2: 187. 1953) has drawn attention to the inconsistent way in which conserved *corrected* names are treated in the Code. He comes to the conclusion that these names should in general be cited in such a way that the conserved but corrected name dates from the original publication. *Malcolmia* R. Brown 1812 ("*Malcomia*"), corr. Sprengel 1818 dates as *Malcolmia* from 1812 and not from 1818.

Additional information.

Additional information may have become available after the adoption of the *nomina conservanda* e.g.:

1. Precise information on the date of publication of the cited books or periodicals may have been published.

2. Earlier authors for conserved and rejected names may have been found.

3. Other earlier homonyms and earlier nomenclatural synonyms of the conserved

names may have been found. It seems advisable to insert them, although under the Code they need not be listed for rejection.

Conclusion.

Many of the entries in the list of *nomina generica conservanda* as it appears in our present Code have already been checked and revised by various authors. Still a general rechecking of the literature together with a reconsideration in the light of the modern development of botanical nomenclature, especially of the type method, is bound to bring to light cases where a revision is needed. In the forthcoming articles of this series I shall try to give some material for such a revision, whenever possible in collaboration with specialists of the group in question. In the present article I have given some notes on the history of the list as well as on the various kinds of cases where the conservation is unnecessary or where the list needs revision.

I shall be extremely grateful to all botanists for sending their remarks and corrections to me. It is clear that it will not be possible to publish a thoroughly revised list in the "*Paris Code*" of this year; maybe, however, such a list could be provided after the Montreal Congress.

In conclusion I should like to thank Dr. and Mrs. T. A. Sprague for the kind way in which they supplied me with the necessary historical information and documents, and Mr. R. Ross for reading the manuscript and for his many stimulating critical remarks and suggestions.

THE GENERIC NAMES PROPOSED FOR HYMENOMYCETES—V*)

"Hydnaceae"

(continuation)

by

M. A. Donk (The Hague)

Hericius Juss. *ex* Lam., Tabl. encycl., Bot., Ill. Genres **3** : 494. 1823. [28]) — Etymology: (h)ericius, hedgehog. Gender: m. — Type species (selected): *Hydnum erinaceus* Bull. — Devalidated name. *Hericius* Juss., Gen. Pl. 4. 1789.—De Jussieu recognized besides *Hydnum* L. a genus *Hericius* (no author's citation) for non-terrestrial species, usually with lateral stalk or sessile cap. No species were mentioned. It may be assumed that the species falling under this definition and previously described and illustrated by Bulliard (Herb. France) belong to the original species. There are sufficient indications in De Jussieu's work to accept this supposition as quite reasonable. One of the species thus included is *Hydnum erinaceus* Bull. *(op cit. pl. 34.* 1780). — Valid publication & scope. This form (with -us) was taken up by De Lamarck, who reserved the name *Hydnum* to the stipitate and pileate species of the Linnean genus (Encycl. méth., Bot. 2 : 385. "1786" [1788]), and intended to deal with *Hericius* more extensively in a later volume of his "Encyclopédie," but did not live to carry out this intention. However, *Hericius* got in print all the same in connection with the plates (Lam., Tabl. encycl., Bot., Ill. Genres **3** : 494. 1823; Rec. Pl. Bot. Encycl. **4** : *pl. 888 below.* "1823" [before 1819]): on the plate here cited a single species is depicted, viz. *Hydnum erinaceus.* No generic des-

*) Part I ("Cyphellaceae") was published *in* Reinwardtia **1** : 199-220. 1951; Part II (Hymenolichenes), *in* Reinwardtia **2** : 435-440. 1954; Part III ("Clavariaceae"), *in* Reinwardtia **2** : 441-493. 1954; Part IV (Boletaceae), *in* Reinwardtia **3** : 275-313. 1955.

The first part of this fifth paper was published in Taxon **5** : 69-80. 1956.

[28]) For dates of publication of De Lamarck's "Encyclopédie," *see* J. Bot., Lond. **44** : 318-320. 1906.

cription accompanies the name *Hericius* "Lamk." in the explanatory text to the plate, but there is a reference, "*Hydrum* [!] Dict.," which may be amplified, in view of the accompanying French name Urchin, as "Urchin [French name]. *Hydnum* [Name accepted by Poiret]. *Hericium* [synonym; name applied as an epithet to a subdivision of *Hydnum* farther down in the text]": Poiret *in* Lam., Encycl. méth. Bot. **8** : 197. 1808. On the cited page one will find under the entry *Hydnum* [soudivision] *Hericium* as description, "Champignons rameux; point de chapeau distinct." — Remark. When Poiret took over the "Encyclopédie," he suppressed *Hericius,* reducing it to a subdivision of *Hydnum,* thus making *Hydnum* once more the wide Linnean genus. He confirmed this disposition some years afterwards (*in* Lam., Encycl. méth., Bot., Suppl. **3** : 41. 1813): "*Hericius.* Juss. Genre que M. de Jussieu a séparé des *hydnum* de Linné. (Voyez Urchin)." This would allow us to ascribe the authorship of *Hericius,* as re-published after the nomenclatural starting-point date, to De Lamarck. The valid publication of *Hericius* by De Lamarck might be questioned on the ground that the publishing author (Poiret) did not definitely accept the genus, but as to the plates, he may, in my opinion, not be held responsible for the names on them, as the plates were engraved on copper undoubtedly long before they were published. — Homonym, variant spelling, & typonyms. If we are willing to agree that *Hericium hystrix* Pers. [*Hydnum hystrix* (Pers.) ex Fr.], *Martella echinus* Scop. [*Hydnum echinus* (Scop.) ex Fr.], and *Hydnum caput-medusae* (Bull.) Pers. [*Medusina patula* Chev.] are to be regarded as synonyms of *Hydnum erinaceus,* then *Hericium* Fr. (1825; "Hydnaceae"; preoccupied), *Medusina* Chev. (1826), *Martella* Endl. (1836; not *Martella* Adans.) become all typonyms of *Hericius* Juss. ex Lam. — When one takes into consideration Art. 82 ("When two or more generic names are so similar, and the plants so closely related, as to cause confusion, they are to be treated as variants of the same name"), *Hericius* Juss. ex Lam. must either be considered a later homonym of *Hericium* Fr. in case one refuses to identify *Hydnum hystrix* with *Hydnum erinaceus;* or merely a variant spelling of *Hericium* Fr. in case one accepts the two generic names as typonyms.

Heteroradulum "McGinty": Lloyd.—See Tremellaceae.

Hirneola Fr. 1825 (not *Hirneola* Fr. 1848). —See "Thelephoraceae."

Hydnellum P. Karst. *in* Medd. Soc. Faun. Fl. fenn. **5** : 41. 1879. — Etymology: diminutive of *Hydnum.* Gender: n. — Type species (selected): *Hydnum suaveolens* Scop. ex Fr. — Scope. Introduced with 19 species and, although this was not especially mentioned, equalling *Hydnum* trib. *Mesopus* sect. *Lignosa* (Fries, Hym. europ. 602. 1874), that is, inclusive of the later genus *Phellodon* P. Karst. First species, *Hydnum suaveolens.* — Typification. *Hydnum suaveolens* was indicated by Banker (*in* Bull. Torrey bot. Cl. **29** : 443, 447. 1902; *in* Mem. Torrey bot. Cl. **12** : 149. 1906) as the type, as it is the first species mentioned; Donk (Rev. niederl. Homob.-Aphyll. **2** : 51. 1933) selected the same species. — Isonym. Later on Karsten substituted *Hydnellum* by "*Calodon* Quél." = *Calodon* P. Karst. (1881), q.v. — Homonym: *Hydnellum* P. Karst. (1896; "Hydnaceae").

Hydnellum P. Karst. *in* Hedwigia **35** : 173. 1896; Krit. Öfvers. Finl. Basidsv. Tillägg 3 : 25. 1898 (= *in* Bidr. Känn. Finl. Nat. Folk **62** : 89. 1903). — Etymology: diminutive of *Hydnum.* Gender: n. — Type species (only original species): *Kneiffia subtilis* P. Karst. — Homonym: *Hydnellum* P. Karst. (1879; "Hydnaceae"). — Status. Impriorable on account of the earlier homonym.

Hydnochaete Bres. *in* Hedwigia **35** : 287. 1896. — Etymology: the genus *Hydnum; χαίτη* hair. Gender: f. — Type species (only original species): *Hydnochaete badia* Bres. — Homonym: *Hydnochaete* Peck (1891; "Hydnaceae").

Hydnochaete Peck *in* Rep. N. York St. Mus. **50** : 113. 1897. — Etymology: the genus *Hydnum; χαίτη,* hair. Gender: f. — Type species (only original species): *Hydnochaete setigera* Peck = *Asterodon ferruginosus* Pat. — Isonym: *Hydnochaetella* Sacc. (1898), q.v. — Homonym: *Hydnochaete* Bres. (1896; "Hydnaceae"). — Typonym: *Asterodon* Pat. (1894); compare "*Aciella.*" — Status. Impriorable on account of the earlier homonym, and, therefore, changed into *Hydnochaetella* Sacc.

Hydnochaetella Sacc., Tab. Com. Gen. Fung. 11. 1898; Syll. Fung. **14** : 11, 211. 1899. — Etymology: diminutive of *Hydnochaete.* Gender: f. — Type species (only original species of basinym): *Hydnochaete setigera* Peck = *Asterodon ferruginosus* Pat. — Basinym: *Hydnochaete* Peck (1897), q.v. —

Typonym: *Asterodon* Pat. (1894); compare "*Aciella.*"

Hydnodon Banker *in* Mycologia **5** : 297. 1913. — Etymology: the genus *Hydnum*?; *ὀδών*, tooth. Gender: m. — Type species (only original species): *Hydnum thelephorum* Lév. —For a recent description see Coker & Beers [Stip. Hydn. east. U.S. 83 *pls. 53 (top), 60 fs. 21-23.* 1951, as *Pseudohydnum thelephorum* (Lév.) Lloyd]. — Typonym: *Pseudohydnum* J. Rick (1904; preoccupied).

Hydnofomes P. Henn.—See "Polyporaceae."

Hydnoporia Murrill.—See "Polyporaceae."

Hydnophysa Clem.—See "Polyporaceae."

Hydnopsis (J. Schroet.) Rea *in* Trans. Brit. mycol. Soc. **3** : 127. 1909. — Etymology: the genus *Hydnum; ὄψις*, appearance. Gender: f. — Type species (only original species of basinym): "*Hydnum tomentosum* Schrad." = *Caldesiella ferruginosa* (Fr.) Sacc. — Basinym: *Phaeodon* subgen. *Hydnopsis* J. Schroet. *in* Cohn, Krypt.-Fl. Schles. **3** (1) : 458. 1888.—Based on a single species called by the author *Phaeodon tomentosus* (Schrad.) J. Schroet. — Valid publication & scope. The generic name was published when Rea had to describe a new species, which he called *Hydnopsis farinacea* Rea. His description runs:

> "*Hydnopsis* Schröt. Pileus resupinatus, effusus. Aculei subulati, gracillimi. Spora fusca vel violacea."—Rea (*l.c.*).

Both *Caldesiella ferruginosa* and *Hydnopsis farinacea*, the species mentioned respectively by Schroeter and Rea, are perfectly matched by it. — Typification. The only species treated under the avowed basinym is here taken as the type species, as nothing in Rea's publication of the generic name in 1909 suggests a different course. — Yet I cannot refrain from believing that Rea committed an error when he took up '*Hydnopsis,*' and that it was his intention to make use of *Amaurodon* J. Schroet., q.v. Both the type of the latter name and Rea's species are smooth-spored (while *Caldesiella ferruginosa* has rough spores). This would also account for the words "Spora fusca vel v i o l a c e a" [29]) in Rea's generic description, *Hydnopsis farinacea* having fuscous, and the species of *Amaurodon* violaceous, spores. Later on Rea (Brit. Bas. 650. 1922) retained *Hydnopsis* for *H. farinacea* (the *Amaurodon* species had at that time not yet been found in the British Isles), and treated *Caldesiella* Sacc. as a distinct genus; in so doing he excluded the type species of *Hydnopsis!* — W. B. Cooke (Gen. Homobas. 46. 1953) listed *Hydnopsis farinaceus* as the type of *Hydnopsis* "(Schroet)" Rea, without stating reasons. If this were acceptable he should have omitted the author's name between brackets. I do not feel that we are entitled completely to ignore the fact that Rea called his genus "*Hydnopsis* Schröt." If we would be entitled to correct a supposed error, we might exchange the type of *Phaeodon* subgen. *Hydnopsis* for that of *Amaurodon.* However, there is nothing in Rea's original generic description to prefer his new species above an other one. — Homonym. *Hydnopsis* Tul. (1865; Sphaeropsidales, Deuteromycetes), based on two separately described species, was not validly published by its authors, because no generic description was added. Perhaps the name was validly published afterwards by another author. — Typonyms: *Odontium* Rafin. (1817; devalidated name), *Odontia* Pers. ex Banker (1929; preoccupied); compare *Caldesiella* Sacc. (1877) and *Phaeodon* J. Schroet. (1888).

Hydnotrema Link.—See "Polyporaceae."

Hydnum L. *ex* Fr., Syst. mycol. **1**: lvi, 389. 1821. — Etymology: *ὕδνον*, ancient name for truffles. Gender: n.

Type species (selected): *Hydnum repandum* L. ex Fr.

Pre-Linnean name: *Hydna* L., Syst. nat. 1735; Gen. Pl. 327. 1737. — Devalidated name: *Hydnum* L., Spec. Pl. **2** : 1178. 1753; Gen. Pl., Ed. 5, 493. 1754.—Linnaeus's first description, of 1737, runs: "*Hydna. Erinaceus* Dill. Mich. 72. Fungus horizontalis, subtus fibris subulatis echinatus." No species were mentioned. In a previous publication (Syst. nat. 1735) he had listed it (name only) as "*Hydna. Erinaceus* D." (D. = Dillenius). One point is perfectly clear: *Hydna* (later *Hydnum)* as introduced by Linnaeus is a mere name change for *Erinaceus* Dill.! By the citation in 1735 of Dillenius, *Hydna* was associated with only one species, the fungus now known as *Hydnum repandum!* The genus *Erinaceus* Dill. (Cat. Pl. ca Gissam nasc. 188 & App. 74 *pl. 1.* 1719), namely, was introduced for this one species. Micheli (Nov. Pl. Gen. 132 *pl. 72.* 1729) used *Erinaceus* for stipitate hydnums in general. Most of this was already pointed out by Banker:

[29]) Spacing is mine.

"[*Hydna* was introduced] without naming any species but [Linnaeus] cites '*Erinaceus* Dill.' Now Dillenius . . . figures and describes but one species which is evidently *H. repandum*. Linnaeus also clearly so understood it, for in Sp. Pl. **2** : 1178 under *H. repandum* he cites 'Flor Suecica, 1098' [= Linnaeus, Fl. Suec. 383 no. 1098. 1745], and in the last-named reference he cites again 'Dill. giss. 188.'"—Banker (*in* Bull. Torrey bot. Cl. **29** : 438. 1902).

At about the same time as that in which his "Genera" appeared, Linnaeus (Fl. lapp. 368. 1737) described two more species in a regional flora (of Lapland), "which, from the descriptions there given and from his own citations in Sp. Pl. **2** : 1178. 1753, are clearly *H. imbricatum* and *H. auriscalpium* respectively."—Banker (*l.c.*). In "Species Plantarum" (**2** : 1178. 1753), the number of species is four, *H. imbricatum* coming first and *H. repandum* second.

Scope. As used by Fries, *Hydnum* was a large genus; it included all Linnaeus's species and many more.

Monadelphous homonym: *Hydnum* S. F. Gray, Nat. Arrang. Brit. Pl. **1** : 650. 1821.—Gray divided *Hydnum* L. (which he attributed to "Dillenius") into several genera. He retained the name *Hydnum* for *H. imbricatum* L. and placed *H. repandum* in *Dentinum* S. F. Gray. This was not intended as an emendation and a splitting up of *Hydnum* L. ex Fr., but was an independent re-publication of Dillenius's and Linnaeus's name starting from Persoon's "Synopsis Fungorum" (1801) after the nomenclatural starting-point date. This (mis)application, although performed in 1821, was actually forgotten until Banker (1902) once more took it into consideration.

Typification. It has already been pointed out that *H. repandum* was Linnaeus's only original species! The situation was aptly summarized by Banker:—

"*Hydnum repandum* is probably the oldest and most commonly known, as well as the most widely spread, species of the family . . . It is also undoubtedly the plant figured and described by Dillenius . . . upon which he founded the genus *Erinaceus*, the prototype of *Hydnum*. When, in 1753, Linnaeus adopted his binomial system of nomenclature, this species, although not placed first in his list, represents the nomenclatorial type of his genus *Hydnum*, according to the interpretation of the principles of generic types by the code here followed." [30])—Banker (*in* Mem. Torrey bot. Cl. **12** : 105. 1906).

Because *Hydnum* of Fries is nothing but an enlarged genus *Hydnum* of Linnaeus, I feel bound to accept *H. repandum* as the type species of the revalidated name too. The arguments for dropping it in favour of another species (namely of *H. imbricatum*, see below) are certainly not of enough weight. [31])

The first radical change in the delimitation of *Hydnum* in the wake of Fries's publications is that proposed by Quélet (*apud* Cooke & Quélet, Clav. Hym. 196. 1878; see also under *Calodon*); he restricted the genus (as "*Hydnum*, Q.") to the resupinate species. The name was applied in this circumscription by Karsten [*in* Rev. mycol. **3** (No. 9) : 20. 1881, as *Hydnum* "Linn."], but not used at all by Quélet himself in subsequent publications (1886, 1888). Nobody has ever selected the type species of *Hydnum* from among the members of this group, for which the use of the name *Hydnum* is to be regarded as a misapplication.

The next author who considerably restricted the genus, was Karsten (1879; see also under *Calodon*). Like Quélet he started from the Friesian genus, rather than from the Linnean one, and he retained *Hydnum* for the group of stipitate, fleshy species to which both *H. imbricatum* and *H. repandum* belong. (In 1881 he abandoned the restricted use of *Hydnum* in this sense for the radically different one proposed by Quélet.) Then came Patouillard (Hym. Eur. 145. 1887) who excluded the *H. imbricatum* group (= *Sarcodon*) and retained under *Hydnum* only the *H. repandum* group. He was followed by Ceip (Monogr. Hydn. Českosl. *in* Fauna Fl. českosl., **2** : 79. 1928; *in* Bull. intern. Acad. Sci. Bohême **31** : 301. 1930) and by most subsequent authors who split the Friesian genus into several smaller ones. This series

[30]) That is, the now rejected American code sponsored by Underwood and his pupils; the first-species rule was a prominent element of it. Even with this code Banker felt himself obliged to select *H. repandum!*

[31]) W. B. Cooke (Gen. Homobas. 46. 1953) listed a genus *Hydnum* "L. ex Banker . . . 1906" with *H. repandum* as the type species, and also a genus *Hydnum* "L. ex Fr. . . . 1821" with *H. imbricatum*.

of emendations, which is to be regarded as the most noteworthy historical development in the reduction of *Hydnum* L. (ex Fr.) to a minor group including *H. repandum* but not containing *H. imbricatum*, has been adduced by Donk (Rev. niederl. Homob.-Aphyll. **2** : 14-15 June 22, 1933) as additional support in favour of the acceptance of *H. repandum* as the type species.

The only rival of *H. repandum* has been *H. imbricatum*. It was originally accepted as the type species of *Hydnum* L. by Banker (*in* Bull. Torrey bot. Cl. **29** : 438, 447. 1902), but rejected afterwards by him in his monograph of the North American stipitate and pileate hydnums, where it was replaced by *H. repandum* (Banker *in* Mem. Torrey bot. Cl. **12** : 105. 1906). The same species was suggested by Clements & Shear (Gen. Fungi 346. 1931), again for *Hydnum* L. 1753. This indication has been defended by Miller (*in* Mycologia **25** : 298, 300. Aug. 1, 1935) and by Miller & Boyle [*in* Stud. nat. Hist. Univ. Iowa **18** (2) : 62. 1943] [32]); this choice was largely induced by Gray's restriction of the name *Hydnum* to *H. imbricatum*. Miller was aware that he departed from contemporary usage by selecting *H. imbricatum*: "*Hydnum repandum* is the nomenclatorial type of *Hydnum* according to common usage" (p. 300); and under *Dentinum* S. F. Gray, the name he preferred for the *H. repandum* group, he stated: "This genus is commonly known today by the name *Hydnum*" (p. 298). I do not understand by which articles he felt himself obliged to restore "the earlier [?!] name *Dentinum* S. F. Gray . . . in accordance with the rules of the international code" (p. 298), and to state that, "According to the international rules it seems that *Hydnum imbricatum* L. must be regarded as the type" (p. 300).

Those mycologists who accept the splitting up of *Hydnum* into several smaller genera, are now almost unanimously using *Hydnum* for the *H. repandum* group, and *Sarcodon* P. Karst. for the *H. imbricatum* group. Miller, as a lonely dissenter, had and has but few followers even in the U.S.A. He has been obliged to apply the name *Dentinum* S. F. Gray to *Hydnum sensu stricto*, and the name *Hydnum* to *Sarcodon!* Hardly an improvement of the prevailing situation. If the acceptance of *H. imbricatum* as the type of *Hydnum* L. ex Fr. would have been a stabilizing factor of present conditions in nomenclatural respect, it would have been expedient, perhaps, to reconsider its substitution for *H. repandum*, but this is certainly not so.

From what has already been stated it will be clear that the following conclusion (Rogers *in* Farlowia **3** : 449. 1949) does not hold: "Miller . . . working under the International Rules, typified *Hydnum* L. ex Fr. emend. Gray by *H. imbricatum* . . . Now Gray must be considered the first post-Friesian author to restrict the originally inclusive genus *Hydnum*, and as such his decision is cogent if not irrevocable." This is a surprising conclusion indeed! First, their does not exist an emendation by Gray of *Hydnum* L. "ex Fr." Secondly, what Gray restricted was the pre-Friesian genus *Hydnum* "L." (which he ascribed to Dillenius!) and that genus started its life as a monotypic one, its only original species being *H. repandum*. Gray may be credited at most with misapplying *Hydnum* L. and since he did so after the starting-point date, with establishing a (monadelphous) homonym *Hydnum* S. F. Gray (non [Dill.] L.). Thirdly, if one wants to assume the attitude of a strict legalistic position, as Rogers does, one has to conclude that Miller merely was the first author who, very doubtfully, typified *Hydnum* L. "ex Fr." by *H. imbricatum* [33]); this was done shortly after Donk had already unambiguously typified the same name ("ex Fr."!) by *H. repandum!* — Remark. When Donk (*op cit.* p. 15) concluded that the facts clearly pointed to *H. repandum* as the type, he added quite inconsistently and superfluously: "Ich schlage jetzt vor den Namen *Hydnum* mit dem Typus *H. repandum* auf die Liste der Nomina conservanda zu setzen." Rogers (*l.c.*) took this as a proposal that aimed at the conservation of *Hydnum* against *Dentinum* S. F. Gray, q.v. He proceeded to advise its rejection. In case that the here accepted type would appear to be in danger, I would not hesitate to support a modus to attain the double goal of saving both the names *Hydnum* and *Sarcodon* P. Karst. (type of the

[32]) It is not evident at all wether Miller and Miller & Boyle ever indicated a type species for *Hydnum* L. "ex Fr." They cited "*Hydnum* L. ex Fr. . . . 1821, emend. Pat. . . . 1887" as a synonym under *Dentinum* S. F. Gray, and admitted a genus "*Hydnum* L. emend. S. F. Gray . . . 1821. Fries . . . 1821, in part." I think that they really 'typified' *Hydnum* L. and *Hydnum* S. F. Gray rather than *Hydnum* L. ex Fr.

[33]) See preceding footnote!

latter name, *Hydnum imbricatum* L. ex Fr.). — Variant spellings. The form *'Hydnum,'* instead of the original one *'Hydna'* (1735, 1737, cited above), was already preferred by Linnaeus himself. He first used it in his "Methodus sexualis" page 22 appended to his "Genera Plantarum" (1737), and soon accepted it definitely, for instance in his "Species Plantarum." The form *Hydna* was taken up by very few authors only: Guettard (Obs. Pl. **1** : 21. 1747) and after 1753 by Boehmer (Ludwig, Defin. Gen. Pl. 492. 1760), who cited Guettard as the author. — *"Hydrum"*; Lam., Tabl. encycl. Bot. **3** : 494. 1823. —See under *Hericius* Juss. ex Lam.

Typonyms: *Erinaceus* Dill. (1719; pre-Linnean), *Bidona* Adans. (1763; devalidated name), *Echinus* Haller (1768; devalidated name), *Dentinum* S. F. Gray (1821), *Tyrodon* P. Karst. (1881), and *Hypothele* Paul. ex Banker (1904; not validly published).

Hyphoderma Wallr.—See "Thelephoraceae."

Hypothele Paul. *ex* Banker *in* Torreya **4** : 113. 1904 (nomen nudum). — Protonym: *Hypothele* Paul., Iconogr. Champ. *pls.* 35, 35*bis*. 1812-35 (not validly published).— This name was given to a part ("famille" 25) of what Paulet had previously called *Fungus*, and to one additional species; first species, *Hypothele repanda* (L.) Paul. = *Hydnum repandum* L. ex Fr. — Paulet's generic name was not validly published and, assuming that it was published before 1821, cannot even be termed a devalidated name (no generic description). For some remarks on Paulet's generic names, see under *Agaricocarnis* ("Polyporaceae"). — Banker (*in* Torreya **4** : 113-117. 1904) used the name *Hypothele* only in the specific combination *Hydnum repandum*, the name of the species which he considered to be the type species. His paper deals with the variability of that fungus. However, he did not ensure the valid publication of the name for there is no accompanying generic description. The reference to Paulet is not valid, because, for one reason, it is to a name which itself is not accompanied by a description[34]); and, if we assume that Banker intended to found a new monotypic genus, the species on which it was based was not a new one. — I am not aware of any subsequent use; Banker himself rejected *Hypothele* in his later work. — Typonyms: *Erinaceus* Dill. (1719; pre-Linnean), *Bidona* Adans. (1763; devalidated name), *Echinus* Haller (1768; devalidated name), *Hydnum* L. ex Fr. (1821), *Dentinum* S. F. Gray (1821), and *Tyrodon* P. Karst. (1881).

Inonotus P. Karst.—See "Polyporaceae."

Irpex Fr., Syst. Orb. veg. 81. 1825[35]); Elench. **1** : 142. 1828. — Etymology: irpex, harrow. Gender: m. — Type species (selected): *Hydnum lacteum* (Fr.) ex Fr. — Scope. When the name was first published (1825) no species were mentioned by name ("Species numerosae"). In 1828 the genus was fully dealt with, and then ten species were referred to it; the latter were divided over two tribes, viz *'Apus'* and *'Resupinatus'*; first species, *Hydnum pendulum* (A. & S.) ex Fr. — Typification. In 1828 Fries (Elench. 143) stated "Generis distinctionem primi indicarunt Albertini et Schweini[t]z." This can refer only to an observation made by these authors in connection with *Sistotrema pendulum* A. & S. (Consp. Fung. nisk. 261. 1805) = *Hydnum pendulum* (A. & S.) ex Fr., Fries's first species in 1828 (Elench. 143), to which Fries added the remark, "Optima generis species." All this draws the attention to *Hydnum pendulum* (A. & S.) ex Fr. selected as the type by Banker (*in* Bull. Torrey bot. Cl. **29** : 440, 448. 1902, for *Irpex* "1828"); by W. B. Cooke (*in* Lloydia **3** : 87. 1940). because it happened to be the first species; and by Donk (Rev. niederl. Hom.-Aphyll. **2** : 201. 1933), because of the remark quoted. However, there is another side to this question which may be briefly expounded. The sentence of 1828 just quoted, "Generis distinctionem . . .," reminds one of a similar remark under *Radulum* Fr. (Syst. Orb. veg. 81. 1825): "*Radulum* . . .; primam speciem proprii generis typum jam censent acutissimi Albertini et Schweinitz. . . . H. l. *Hydnum pendulum* . . ." The same idea in connection with the same epithet, in 1825 under *Radulum*, in 1828 under *Irpex!* I believe the situation may be explained as follows. About 1825 Fries had three new genera in stock, *Radulum*, *Irpex*, and a third one of which we do not even know the manuscript name but which would have included *Hydnum pendulum* (A. & S.) ex Fr. Afterwards Fries decided to drop this last genus, and when he published his "Systema

[34]) Paulet used *Hypothele* merely as the generic appellation in specific names on two plates.

[35]) See also page 362.

orbis vegetabilis" he included—by error—the clause just quoted under *Radulum* instead of under *Irpex* (which appeared on the same page!). However, when he published his "Elenchus" he corrected his error and transferred the (altered) remark to *Irpex*.[36] Seen in this light, the note "Optima generis species" under *H. pendulum* (A. & S.) ex Fr., as a member of *Irpex*, acquires a different meaning, so much as: 'This belongs to *Irpex*, rather than elsewhere.' Such a statement would not fit in with the actual—not indicated—type species, of which this needed hardly to be said. Confirmation of the thesis that in reality three genera were involved, of which one afterwards was suppressed, first by reducing it (by error) to *Radulum* and later on to *Irpex*, may be found in his subsequent work. For instance, we find under *Irpex pendulus* (A. & S. ex Fr.) Fr. in Fries's "Hymenomycetes europaei" (p. 620, 1874) this passage: "Characteres omnino generis [*Irpicis*], sed nulli alii fungo hydneo affinis, potissimum vero *Cyphellae* et remotius *Trogiae*, ut facile peculiaris generis typus." *Hydnum pendulum* is here still the troublesome fungus, for which he still considers the desirability of publishing a proper genus. If the above interpretation of the facts is thought to be acceptable, the consequences are that *Hydnum pendulum* (A. & S.) ex Fr. should neither be selected as the type species of *Radulum* Fr., q.v., nor as the type species of *Irpex*. Personally, I now reject *H. pendulum* (A. & S.) ex Fr. as the type species of *Irpex*. — Another species, *Hydnum lacteum* (Fr.) ex Fr., has been selected as the type by Clements & Shear (Gen. Fungi 346. 1931), Bondarzew & Singer (*in* Ann. mycol. **39** : 63. 1941; *apud* Sing. *in* Mycologia **36** : 67. 1944), Imazeki (*in* Bull. Tokyo Sci. Mus. No. 6 : 53. 1943), and Cunningham (*in* Bull. Pl. Dis. Div., Dept. sci. ind. Res., N. Zeal. No. 82 : 2. 1949). I recommend this choice for acceptance, because it served already as the type species in recent publications. Perhaps *Irpex fuscoviolaceus* (Ehrenb. ex Fr.) Fr. would have been preferable?! — VARIANT SPELLING: *Irpex* S. Schulz. *apud* S. Schulz., Kanitz & Knapp *in* Verh. zool.-bot. Ges. Wien **16** (Abhand.): 46. 1866.

Irpicochaéte J. Rick *in* Ann. mycol. **38** : 58. 1940. — ETYMOLOGY: the genus *Irpex; χαίτη*, hair. Gender: f. — TYPE SPECIES (only original species): *Irpicochaete nodulosa* J. Rick (*"nodulosum"*). — REMARK. Although the (complete) generic description runs, "*Irpex* cum dendrophysibus," the description of the only species contains, ". . . dentibus . . . subulatis, regularibus."

Irpex.—See *Irpex*.

Kavinia Pilát *in* Stud. bot. čechoslov. **1** : 3. 1938. — ETYMOLOGY: C. Kavina. Gender: f. — TYPE SPECIES (only original species): *Caldesiella sajanensis* Pilát.—According to Pilát (*apud* Christiansen *in* Friesia **4** : 336. 1953) this is synonymous with *Clavaria bourdotii* Bres. (which, in its turn, belongs to *Hydnum alboviride* Morg.); John Eriksson (*in* Svensk bot. Tidskr. **48** : 198. 1954), too, identified Pilát's species with *C. bourdotii*.

Kneiffia Fr.—See "Thelephoraceae."

Kneiffiella Underw.—See "Thelephoraceae."

Kneiffiella P. Henn.—See "Thelephoraceae."

[*Kordyanella* Höhn.—See under Exobasidiaceae.]

Leaia Banker *in* Mem. Torrey bot. Cl. **12** . 175. 1906. — ETYMOLOGY: T. G. Lea. Gender: f. — TYPE SPECIES (selected): *Leaia piperata* Banker.—According to Banker himself (*in* Mycologia **2** : 7-11. 1910) and to Miller [*apud* Miller & Boyle *in* Stud. nat. Hist. Univ. Iowa **18** (2) : 9-10. 1943], and verified by me after the study of a part of the type collection in my herbarium, this species is synonymous with *Gloiodon strigosus* (Sw. ex Fr.) P. Karst. — SCOPE. Based on two species. No type indicated. — TYPIFICATION. In agreement with the code of nomenclature followed by the author of the name, the first species is here considered to be the type. Already accepted as such by W. B. Cooke (Gen. Homobas. 54. 1953). — TYPONYMS: *Gloiodon* P. Karst. (1879) and *Sclerodon* P. Karst. (1889).

Leptochaete Lév.—See "Thelephoraceae."

Leptodon Quél., Ench. Fung. 191. 1886. — ETYMOLOGY: *λεπτός*, thin; *ὀδών*, tooth. Gender: m. — TYPE SPECIES (selected): *Hydnum pudorinum* Fr.—Now often accepted as a synonym of *H. ochraceum* Pers. ex Fr.

---

[36]) The first name mentioned under *Radulum* in 1825 is, as stated above, "*Hydnum pendulum*," the species under discussion. In 1828 Albertini & Schweinitz's species is found as the first species under *Irpex* as *I. pendulus*, and the first species of *Radulum* is *Radulum pendulum* Fr.

— Scope. Introduced (with seven species) for (i) *Hydnum* trib. *Pleuropus* Fr. (Epicr. 510. 1838; Hym. europ. 606. 1874; not *Hydnum* trib. *Pleuropus* Fr., Syst. mycol. **1**: 407. 1821), and (ii) *Hydnum* trib. *Apus* groups *** and **** (Fries, Hym. europ. 611. 1874), although Quelét did not refer to them. The genus matches *Pleurodon* Quél., but is somewhat restricted by the exclusion of Fries's first two groups of *Hydnum* trib. *Apus* Fr. — Typification. The name was taken up by Patouillard (Hym. Eur. 146. 1887) and limited to the non-stipitate species, and thus such species as *Hydnum occidentale* Fr. and *H. auriscalpium* L. ex Fr. were excluded; he mentioned as representatives of his emended genus "*L. pudorinum, L. ochraceum*, etc.," two of the species included by Quélet. Afterwards Patouillard renamed this emended genus *Mycoleptodon* Pat., q.v., *Leptodon* Quél. being preoccupied; at this occasion Patouillard mentioned only *H. pudorinum* as an example, thus singling the latter out for both *Leptodon* (indirectly) and for its isonym *Mycoleptodon*. — It was only afterwards that Banker (*in* Bull. Torrey bot. Cl. **29**: 443, 448. 1902) considered Quélet's first species, *H. occidentale*, as the type. This latter species may be disregarded in favour of *H. pudorinum*. — Donk (*in* Bull. bot. Gdns Buitenzorg III **17**: 174. 1941; under *Mycoleptodon*) and W. B. Cooke (Gen. Homobas: 56. 1953 [37])) took *H. auriscalpium* as the type species, which would appear to be an indefensible choice. — Homonym: *Leptodon* Weber apud Mohr (1803; Neckeraceae, Musci frondosi); compare Dixon (*in* Rev. bryol. lichén. **7**: 138-139. 1934). — Isonym: *Mycoleptodon* Pat. (1900), q.v. — Typonyms: *Steccherinum* S. F. Gray (1821) and *Odontina* Pat. (1887). — Status. Imprriorable on account of the earlier homonym.

Licentia Pilát.—See "Thelephoraceae."

Lopharia Kalchb. & McOwan.—See "Thelephoraceae."

Lyomyces P. Karst. 1881.—See "Thelephoraceae."

Malocodon Bataille *in* Bull. Soc. mycol. France **39**: 203. 1923. — Etymology: *μαλακός*, soft; *ὀδών*, tooth. Gender: m. — Type species (only original species): *Hydnum candidum* Schmidt = *Hydnum candidum* Schmidt ex Fr.—Our knowledge of this fungus seems to be restricted to the original description.

Manina Adans.—See "Clavariaceae."

Manina Banker *in* Mycologia **4**: 275. 1912. — Etymology: an Italian fungus name, derived from mano, hand. Gender: f. — Type species (by original designation): *Manina cordiformis* Scop. sensu Banker = *Hydnum erinaceus* Bull. ex Fr. — Scope. Introduced for a genus equivalent to *Hericium* Pers. and including as its most prominent members both *Hydnum erinaceus* and *H. coralloides* Scop. ex Fr. — Remarks. Banker rejected *Manina* Adans. (1763; "Clavariaceae"), q.v., as an unacceptable name because it was not associable with 'binomials.' He ascribed *Manina* to Scopoli. The latter author [Scopoli, Diss. Sci. nat. **1** (Pl. subterr.): 97. 1772] was the first to use Adanson's generic name, as "*Manina*. Adanson. Famil. Plant. p. 5," in binomials in accordance to the Linnean nomenclatural method. Or, rather, he merely added seven species to it: '*Manina* Scop.' is nothing but an application of *Manina* Adans. Nevertheless, this complementary part Banker considered to be a genus of its own, properly named, and distinct from *Manina* Adans.; moreover, he took Scopoli's first species as the type. From our point of view there is no '*Manina* Scop.' except as a later application of *Manina* Adans. and Banker's use of it resulted in the valid publication of a 'new' generic name; neither Adanson nor Scopoli must be cited as the pre-starting-point author in connection with Banker's name. — "*Manium* Scop. pl. subterr. t. x," cited as a synonym of *Hydnum* Fr. (*Bidona* Adans.) by Endlicher (Gen. Pl. 39. 1836) must be an error for "*Manina*." — Homonym: *Manina* Adans. (1763; "Clavariaceae"; devalidated name). — Typonyms. It is likely that both *Hericium* Fr. (1825; preoccupied), q.v., and *Medusina* Chev. (1826), q.v., are based on abnormal forms of *H. erinaceus;* and compare *Martella* Endl. (1836) and *Martella* Adans. ex O.K. (1898; preoccupied).

Manium "Scop."—See under *Manina* Banker.

Martella Adans.—See *Martella* Adans. ex O.K.

Martella Adans. *ex* O.K., Rev. Gen. Pl. **3** (2): 492. 1898. — Etymology: martello, Italian for scourge. — Type species (selected): *Agaricum* ordo VI sp. no. 1 Mich., Nov. Pl. Gen. 122 *pl. 64 f. 1* = *Hericium hystrix* Pers.—This has been accepted as a good

[37]) Cooke also listed *Leptodon* Quél. "sensu Pat." with *Hydnum pudorinum* as the type species.

species although it has apparently never been seen by modern authors. It is, I believe, a species of *Hericium* Pers. ex S. F. Gray and perhaps a not too abnormal form of *Hericium erinaceus* (Bull. ex Fr.) Pers. It is possible that the fungus grew downwards; and not upwards, which was Fries's reason for keeping this and similar fungi in a genus of their own, under the name of *Hericium* Fr., distinct from *Hericium* Pers. (*Hydnum* trib. *Merisma* Fr.) — DEVALIDATED NAME: *Martela* Adans., Fam. Pl. **2** : 5. 1763. — Adanson cited as representatives of his genus: *Agaricum* ordo VI nos. 1 & 2 (*pl. 64 fs. 1, 2*) of Micheli (*l.c.* p. 122), a species of Battarra (Fungi Agri arimin. Hist. 67 *pl. 33 f. C.* 1755), and one of Vaillant (Bot. paris. *pl. 8 f. 1* [38]). Only Micheli's two species will be taken into account here. The first of these was the basis of *Hericium hystrix* Pers. = *Hydnum hystrix* (Pers.) ex Fr. (see above), the second [39] appears to me as perhaps identical with *Manina flagellum* Scop. (cf. Banker *in* Mycologia **4** : 276. 1912), but in any case it must be identified with *Hydnum coralloides* Scop. ex Fr. [40] — The first (pre-Friesian) author to introduce *Martela* in the Linnean binomial nomenclature system was Scopoli [Annus IV hist.-nat. (IV. Fungi quidam rariores in Hungaria nunc detecti) : 151. 1770 [41]]. He cited the name as "*Martella* Adans. Fam. Plant. II. p. 5.," gave no generic description or remarks, but described a new species, *Martella echinus* Scop., [42]) under this generic name. It will be clear from these remarks that Scopoli accepted Adanson's genus without restrictions; the only thing he did was to add a new representative to it. Shortly afterwards, Scopoli (Fl. carniolica, Ed. 2, **2** : 472-473. 1772) abandoned the genus and included it in *Hydnum* L.; under *Hydnum coralloides* Scop. he cited *Martella* Adans. as well as Micheli's second species *(pl. 64. fig. 2)* as a synonym (". . . huic proximum"). See further *Martella* Endl. — VALID PUBLICATION & SCOPE. Adanson's generic name, with the reference "*Martella* A. 1763 Fam. II : 5 em. Scop. 1772 Pl. subterr. 151," was taken up after 1821 by O. Kuntze (*l.c.*), who used it instead of "*Hericium* Pers. 1797 . . . Saccardo syll. VI : 479." In the absence of an accompanying description the valid publication of '*Martella* Adans.' by Kuntze depends on the reference to Adanson's pre-Friesian description. — TYPIFICATION. Kuntze (*l.c.*) considered the first of Micheli's species (*Hericium hystrix)* to be the type of *Martela* Adans. He preferred to adopt "*Agaricus*" [= *Hydnum*] *hystricinum* Batsch as basinym, correctly from his point of view since it was an earlier name than *Hericium hystrix*, both introduced for Micheli's species. Donk (*in* Reinwardtia **2** : 466. 1954) accepted Kuntze's choice. — VARIANT SPELLING. Adanson's original spelling is *Martela*. The common conviction of all authors who applied or mentioned this name appears to be that it should be spelt *Martella*, it being evidently derived from the Italian martello, scourge. — HOMONYM. *Martella* Endl. (1836; "Hydnaceae"), q.v. — TYPONYMS: *Hericium* Fr. (1825; preoccupied), and perhaps *Medusina* Chev. (1826) and *Manina* Banker (1912), and presumably also *Martella* Endl. (1836). — STATUS. Impriorable on account of the earlier homonym.

Martella Endl., Gen. Pl. 36. 1836. — ETYMOLOGY: martello, Italian for scourge. Gender: f. — TYPE SPECIES (selected): *Martella echinus* Scop. = *Hydnum echinus* (Scop.) ex

---

[38]) The citation of Vaillant's plate 8 "f. 1" is an obvious error as already pointed out by Leman (*in* Dict. Sci. nat. **29** : 259. 1823); I think that either 'f. 3' or 'f. 4' was meant and would also draw attention to the fact that 'f. 1' was the base of Adanson's genus *Kordera* (Deuteromycetes), q.v.

[39]) *Agaricum* [ordo VI] *esculentum, album, cespitosum, multifidum, & denticulatum, denticulis asperis* Mich.

[40]) In another paper I hope conclusively to demonstrate that *Manina flagellum* Scop. sensu Banker and *Hydnum laciniatum* Leers sensu Banker are synonymous with *Hydnum coralloides* and that the species called *Hydnum* (or *Hericium) coralloides* by Banker and Coker & Beers must receive another name.

[41]) Several authors (including Endlicher and O. Kuntze) cited Scopoli's use of *Martella* as 'pl. subterr. 151 [1772].' There can be no doubt that they did not look up either the latter publication or the correct one.

[42]) The species was said to resemble entirely, in habit and in stature, Micheli's fungus that was later on to be called *Hericium hystrix* (type species selected for *Martela* Adans.), but to differ in its yellow colour (flavus) and its fistulose spines. It was not positively stated that it was growing upright; one is tempted to interpret it as a (weathered) form of *Hericium hystrix* = *H. erinaceus.*

Fr.—See foot-note 42 under *Martella* Adans. ex O.K. — Valid publication & scope. Endlicher supplied a description. However, he did not mention any species by name, but referred to "*Martella* Scop. pl. subterr. 151. *Hericium* Fries pl. homon. 88. *Hydna Gomphi* Fries Syst. I. 410." — Typification. From the erroneous citation "*Martella* Scop. pl. subterr. 151" one would conclude that Endlicher did not verify it. What he incorrectly transcribed was "*Martella* Scop. Fung. Hung. p. 151" as cited by Fries (Syst. mycol. **1** : 410. 1821) as a synonym under "*H*[*ydnum*] *Echinus.*" Endlicher committed the error (afterwards repeated by other authors) of assuming the identity of the two works by Scopoli.[43]) What happened, I think, is this: In 1821 Fries mentioned *Martella* [*echinus*] Scop. as a synonym (basinym) of *Hydnum echinus* (Scop.) ex Fr., omitting the epithet "echinus" by error. After Fries had raised his '*Gomphi*' to generic rank under the name *Hericium* Fr., q.v., Endlicher noticed that that author had not taken up the generic name *Martella* and concluded that Scopoli was the originator of a genus '*Martella* Scop.' with a single species *(Hydnum echinus);* at the same time he overlooked the existence of *Martella* Adans., q.v. The result was that he 'corrected' Fries and 'restored' what he thought was the name that should be used for reasons of priority. Although taxonomically *Martella* of Endlicher and *Hericium* Fr., as originally published, cover the same group, the former name is from a nomenclatural point of view, obligately coupled with *M. echinus*, while we are not obliged to select the same species as the type of *Hericium* Fr. *Martella* Endl. is, therefore, not necessarily an isonym of *Hericium* Fr. These considerations will help to understand why Donk (*in* Reinwardtia **2** : 466. 1954) selected *Martella echinus* as the type species.— Remark. Scopoli's use of *Martella* Adans. (the first application of the latter name in the binomial system) can be no reason for admitting a generic name '*Martella* Scop. (not *Martella* Adans.)' and consequently one is not authorized to speak of '*Martella* Scop. ex Endl.' Neither should one speak of '*Martella* Adans. ex Endl.' because the type *(Martella echinus)* is not the same as that of *Martela* Adans. *(Hericium hystrix)*, not even if the two plants might be considered as forms of a single species. Thus we arrive at '*Martella* Endl. (not *Martella* Adans.).' — Homonym: *Martella* Adans. ex O.K. (1898; "Hydnaceae"; preoccupied), q.v. — *Martellia* Mattir. (1900; Gastromycetes) is not a homonym, being called after U. Martelli. — Typonyms. The following names might perhaps prove to be typonyms: *Hericium* Fr. (1825; preoccupied), *Medusina* Chev. (1826), *Martella* Endl. (1836), *Martella* Adans. ex O.K. (1898; preoccupied), and *Manina* Banker (1912).

[*Matruchotria* Boul.—See "Clavariaceae."]

Medusina Chev., Fl. gén. Env. Paris **1** : 278. 1826. — Etymology: Medusa, Greek goddess. Gender: f. — Type species (selected): *Medusina patula* Chev., an isonym of *Hydnum caput-medusae* (Bull.) ex Fr.—This seems to represent a somewhat abnormal form of *Hydnum erinaceus* Bull. ex Fr.: compare Bourdot & Galzin (Hym. France 443. 1928). — Scope. Introduced with two species. — Typification. No doubt the first species has to be selected as the type; it was already indicated as such by Banker (*in* Mycologia **4** : 272, 275. 1912).

Mucronella Fr., Hym. europ. 629. 1874. — Etymology: mucronella, little sharp point. Gender: f. — Type species (only original species of basinym): *Hydnum calvum* (A. & S.) ex Fr. — Basinym: *Mucronia* Fr. (1849), q.v. — Scope. Three species were included when this name change was affected; the third is *Mucronella calva* (A. & S. ex Fr.) Fr. — Typification. The type species of the basinym, *Isaria calva*, has generally been indicated as type: Banker (*in* Bull. Torrey bot. Cl. **29** : 442, 448. 1902), Clements & Shear (Gen. Fungi 346. 1931), Miller (*in* Mycologia **25** : 295. 1933), Doty (*in* Lloydia **11** : 132. 1948), and Miller & Boyle [*in* Stud. nat. Hist. Univ. Iowa **18** (2) : 6. 1943]. — Corner (Monogr. Clavaria 689. 1950) preferred *Mucronella aggregata* (Fr.) Fr. (see under *Mucronia*).

Mucronia Fr., Summa Veg. Scand. **2** : 329. 1849. — Etymology: mucro, -onis, the sharp point of a sword, poniard. Gender: f. — Type species (only original species): *Hydnum calvum* (A. & S.) ex Fr. — Protonym: *Mucronia* Fr., Syst. mycol. **3** (2) : 278. 1832.— Mentioned as a provisional name under *Isaria calva* (A. & S.) ex Fr. as follows: "Maxime itaque recidit, *Soleniis* fructificatione, non forma, proxima, sui generis: *Mucronia*, quale limitibus vagis hoc loco recipere nolui." — Remark. Corner (Mono-

[43]) See also foot-note 41. Afterwards Fries (Hym. europ. 617. 1874) cited: "*Martella Echinus* Scop. Ann. IV, Hist. nat. p. 151."

gr. Clavaria 689. 1950) indicated as the type of *Mucronia* as well as of *Mucronella* a species not originally included in *Mucronia,* viz. *Mucronia aggregata* Fr. This species is perhaps the best known representative of those that are to-day retained in the genus, but it is obviously unacceptable. — Homonym: *Mucronea* Benth. (1836; Polygonaceae; note the slight difference in spelling). — Isonym. Fries changed the name into *Mucronella* Fr., q.v., presumably on account of the earlier homonym. — Status. Impriorable on account of the earlier homonym.

Mycoacia Donk *in* Meded. Nederl. mycol. Ver. **18-20** : 150. 1931. — Etymology: *μύκης,* fungus; the genus *Acia* P. Karst. Gender: f. — Type species (by original designation): *Hydnum fuscoatrum* Fr. ex Fr. — Basinym. A "nov. nom." for "*Acia* Pat., Ess. tax. 68, 1900; *Acia* Karst. pr. p.; non *Acia* Schreb." — Remark. The name was accompanied by a (Dutch) description, and in a foot-note by the remark that "*Acia* Pat." had to be rebaptized. — The indication by Miller & Boyle [*in* Stud. nat. Hist. Univ. Iowa **18** (2) : 38. 1943] of *Hydnum setosum* Pers. as the species is evidently due to an error.

Mycobonia Pat.—See "Thelephoraceae."

Mycoleptodon Pat., Cat. rais. Pl. cell. Tunis. 54. 1897; Essai taxon. Hym. 116. 1900. — Etymology: *μύκης,* fungus; the genus *Leptodon.* Gender: m. — Type species (same as of basinym): *Hydnum pudorinum* Fr.— This is now fused with *H. ochraceum* Pers. ex Fr. — Basinym: *Leptodon* Quél. (1886), q.v.—Mentioned by Patouillard as "*Leptodon* Quélet Enchirid. 191; Pat. Hym. d'Europ. 146; (non Mohr)." — Scope & typification. *Hydnum pudorinum* was selected by Donk (*in* Bull. bot. Gdns Buitenzorg III **17** : 174. 1941). It was the only species mentioned when the name was introduced and the first one enumerated in 1900. This choice matches the notion that *Mycoleptodon* is an isonym of *Leptodon.* — Remark. Before accepting S. F. Gray's "Natural Arrangement" as being published after Fries's "Systema," volume 1, Donk (*op. cit.* pp. 157, 174) moved a proposal to conserve *Mycoleptodon* against *Odontia* Fr. (non Pers.) with *Hydnum fimbriatum* (Pers.) ex Fr. as the type species and which according to some mycologists is a member of *Mycoleptodon.* The proposal was withdrawn when *Odontia* S. F. Gray was accepted as validly published and, therefore, *Odontia* Fr., as impriorable (Donk *in* Bull. bot. Gdns Buitenzorg III **18** : 100. 1949).[44]) There seemed to be no sufficient reason to insist on the conservation of *Mycoleptodon* against *Steccherinum* S. F. Gray. — Typonyms: *Steccherinum* S. F. Gray (1821) and *Odontina* Pat. (1887).

Neokneiffia Sacc.—See "Thelephoraceae."

Odontia Hill (pre-Linnean name).—See under *Odontia* S. F. Gray.

Odontia Pers. ex Banker.—See under *Odontia* S. F. Gray.

Odontia S. F. Gray, Nat. Arrang. Brit. Pl. **1** : 651. 1821. — Etymology: *ὀδών, -όντος,* tooth. Gender: f. — Type species (selected): *Hydnum obtusum* Schrad.—This species has been identified with *Radulum quercinum* (Fr., non Pers.) Fr. by Fries (Hym. europ. 623. 1874). — 'Protonym': *Odontia* Hill, General nat. Hist. **2** : 30. 1751.—This is, as far as I have been able to find out, the first introduction of the name. It covers a genus of Hill's Fungi, Class the first, "such as grow in horizontal direction on trees," and was characterized as having "their under surface formed into oblong, slender bodies, like teeth." Contents: non-centrally stipitate hydnums. — Devalidated name: *Odontia* Pers. *in* Neues Mag. Bot. **1** : 110. 1794 (= Tent. 30. 1797).—Introduced with two new strictly resupinate species, *O. ferruginea* Pers. and *O. nivea* Pers., in this order. Soon afterwards Persoon (Obs. mycol. **2** : 16-17. 1799) added some more species: *O. crustosa* Pers., *O. cerasi* Pers., and *O. quercina* Pers. Again a few years later Persoon (Syn. Fung. 560. 1801) brought the number of species up to ten and reduced the taxon in rank: *Hydnum* sect. *Odontia* (Pers.) Pers. Isonym of the latter name: *Odontium* Rafin. (1817), q.v. — Scope. Persoon's group of 1801, rather than the original genus, was taken up by Gray and raised to generic rank. He called the genus "*Odontia.* Persoon." The circumscription of the group was not altered, but Gray recorded only two (British)

---

[44]) The proposal was nevertheless maintained by the Secretary of the Special Committee for Fungi and submitted to a vote. It was rejected by ballot by the Committee (*in* Taxon **2** : 31. 1953; *in* Mycologia **45** : 320. 1953). The Secretary evidently confused proposals of this kind with valid publication of names; and forgot that accepted procedure admits withdrawal of nomenclatural proposals by their authors.

species in his regional flora: *Hydnum obtusum* and *H. diaphanum* Schrad. (specific definitions translated from Persoon's "Synopsis," pp. 562, 563!). — TYPIFICATION. If no later starting-points had been introduced, Gray's use of *Odontia* would be considered to be but a mere application of Persoon's name. Now that we are forced to take it as the valid re-publication of the name, two courses are open to arrive at a decision as to what is to be considered Gray's original species; we might make our choice of (i) all of Persoon's species of 1801, or (ii) of the two mentioned in Gray's British flora. Personally, I would prefer the first course because Gray did not alter the circumscription of the genus; this would lead to the selection of one of Persoon's original species (of 1794), viz. *Odontia ferruginea* (see below). The alternative course would lead to the selection of, for instance, *Hydnum obtusum*. In the first case, *Odontia* would become the correct name for *Caldesiella* Sacc. (1877), an interpretation already sponsored by Banker (see below). In the second case, *Odontia* would be the correct name for a quite different genus, depending on the position assigned to *Hydnum obtusum* (which, eventually, might be regarded as a nomen dubium). In agreement with recent usage the second course is adopted, and consequently *Odontia* S. F. Gray is treated as dissociated from *Odontia* Pers., the original species recorded under the two names being different. — Clements & Shear (Gen. Fungi 346. 1931) suggested *Hydnum fimbriatum* Pers. ex Fr. as the type species of "*Odontia* Pers. 1796." The same species was chosen by Miller (*in* Mycologia **25** : 293. 1933; **26** : 19. 1934) and Miller & Boyle [*in* Stud. nat. Hist. Univ. Iowa **18** (2) : 19. 1943] for "*Odontia* Pers. emend. Fries, Epicr. 528. 1838." This is, of course, neither acceptable for *Odontia* Pers. nor for *Odontia* S. F. Gray; but compare the homonym *Odontia* Fr. — W. B. Cooke (Gen. Homobas. 67. 1953) listed Gray's first species *(Hydnum obtusum)* as the type of *Odontia* Pers. ex S. F. Gray. — MONADELPHOUS HOMONYM: *Odontia* Pers. *ex* Banker *in* Mycologia **21** : 147. 1929.—With *O. ferruginea* = *Caldesiella ferruginosa* (Fr.) Sacc. as type species, *Odontia* Pers., as emended and re-published by Banker (*in* Bull. Torrey bot. Cl. **29** : 448. 1902, indication of type species; *in* Mycologia **21** : 147. 1929, application of Persoon's generic name), is a monadelphous homonym of *Odontia* S. F. Gray. One is also reminded of Patouillard's conception (Hym. Eur. 149. 1887) of "*Odontia* (Fr.)" which, like Banker's, equals *Caldesiella;* however, this use is rather to be taken as a misapplication of *Odontia* Fr. (1835). Typonyms (of *Odontia* Pers. ex Banker): *Odontium* Rafin. (1817; devalidated name), *Caldesiella* Sacc. (1877), *Hydnopsis* (J. Schroet.) Rea (1909), and compare *Phaeodon* J. Schroet. (1888). — REMARK. If Gray's name is typified by *Hydnum obtusum,* the course reluctantly adopted above, the name ought to be cited as *Odontia* S. F. Gray (non Pers.). — HOMONYMS: *Odontia* Fr. (1835; "Hydnaceae"), q.v. — Compare also *Odontium* Rafin. (1817; "Hydnaceae"; devalidated name). —

Odontia Fr., Fl. scan. 340. 1835; Gen. Hym. 13. 1836; Epicr. 528. 1838. — ETYMOLOGY: *ὀδών, —όντος,* tooth. Gender: f. — TYPE SPECIES (by 'original' designation in 1836, and in 1838 under *Odontia fimbriata*): *Hydnum fimbriatum* (Pers.) ex Fr. — SCOPE & TYPIFICATION. In 1835 no species were mentioned, but in 1836 (as well as in 1838) the type was explicitely designated; in 1836 some other species were mentioned in addition.[45]) — REMARK. See also "Remark" under *Mycoleptodon.* — HOMONYMS: *Odontia* Pers. (1794; "Hydnaceae"), q.v., and *Odontia* S. F. Gray (1821; "Hydnaceae"), q.v. — *Odontia* Fr. cannot be interpreted as a monadelphous homonym of *Odontia* S. F. Gray (which in its turn is a derivative of *Odontia* Pers.). When Fries had disposed of *Odontia* Pers. as a synonym, he introduced a new genus with the 'same' name (and consequently did not mention Persoon as the author). Similar cases are those of *Corticium* Pers. and *Corticium* Fr., *Hericium* Pers. and *Hericium* Fr., and so on. The confusing point is that the differences between the two genera are but very slight in the light of their descriptions. I am not the first who felt bound to consider *Odontia* Fr. as a normal homonym (cf. Donk *in* Bull. bot. Gdns Buitenzorg III **17** : 174. 1941) of the earlier name *Odontia* Pers. (and of

[45]) W. B. Cooke (Gen. Homobas. 67. 1953) must have interchanged the specific names when he listed "*Odontia fimbriata* Fr." as type species of "*Odontia* Fr. sensu Pat. Hym. Eur. 149. 1887" (a species Patouillard did not mention), and "*Odontia barba-jovis* Fr." as type species of "*Odontia* Fr. Fl. Scan. 1835." The "sensu Pat." in this case merely means that *O. barba-jovis* is that author's first species.

Odontia S. F. Gray): Banker came to the same conclusion and replaced Fries's *Odontia* by *Etheirodon* Banker, q.v. Fries's earlier group *Hydnum* sect. *Odontia* (Obs. mycol. **1** : 149. 1815) is rather an application of *Hydnum* sect. *Odontia* Pers.; he cited no author and entered three (additional) species, viz. *Hydnum pinastri* Fr., *H. fuscoatrum* Fr., and *H. agardhii* Fr. — Isonym: *Etheirodon* Banker (1902), q.v. — Status. Impriorable on account of *Odontia* S. F. Gray (1821).

Odontina Pat., Hym. Eur. 147. 1887. — Etymology: derived from *Odontia*. Gender: f. — Type species (selected): *Hydnum denticulatum* Pers.—As previously described and depicted by Patouillard (Tab. anal. Fung. **1** : 64 *no. 148.* 1883), this species is conspecific with *Hydnum ochraceum* Pers. ex Fr. (or, perhaps, with *H. pudorinum* Fr., which, however, is to-day not regarded as specifically distinct from *H. ochraceum).* — Scope. The genus was introduced for species with "cystides *très saillantes,* à parois souvent épaises ou rugueuses et qui sont très abondantes à l'extremité stérile des aiguillons." [46]) The fruit-bodies were described as "résupinés ou étales réfléchis, à receptacle mince, *coriace* ou pulvérulent." [46]) "Espèces principales: *O. denticulata, O. junquillea, O. hyalina, O. stipata, O. farinacea,* etc." The first of these is an effused-reflexed species, the others are strictly resupinate and represent a good portion of *Odontia* "Fr." as emended by Bourdot & Galzin (Hym. France 419. 1928). With "*O*[*dontina*] *junquillea*" *Odontia junquillea* Quél. is meant, a species of which previously a correct interpretion was given by Patouillard (Tab. anal. Fung. **1** : 65 *no. 149.* 1883) and which is now often referred to *Odontia corrugata* (Fr.) Bourd. & G. One of the other original species, "*O. farinacea*" is, I think, *Odontia farinacea* (Pers. [ex Fr.]) Quél. sensu Quél., afterwards renamed *Odontia queletii* Bourd. & G.; the presence of conspicuous cystidia and smooth spores (as required by the generic description) makes this conclusion very likely. The identity of the two other examples listed is not so easily determinable. — Typification. The first species, "*O. denticulata,*" was considered to be the type by Banker (*in* Bull. Torrey bot. Cl. **29** : 445, 448. 1902). Its presence in *Odontina* leads to the conclusion that in 1887 Patouillard was still unaware of the microscopical structure of the genus which he at that time called *Leptodon* Quél. ("Espèces principales: *L. pudorinum, L. ochraceum*") and of which he did not mention the cystidia. Afterwards Patouillard (Essai taxon. Hym. 60. 1900) listed *Odontina* as a synonym of *Odontia* Fr., [47]) which he restricted to resupinate species and which he characterized thus: "Receptacle résupiné, coriace membraneux ou crustacé . . .; cystides rarement nulles, isolées ou fasciculées, fréquemment réunies en bouquet au sommet des aspérités de la surface . . ." (p. 60). For *Mycoleptodon* Pat., that is, *Leptodon* of 1887, he gave as important characters: "Receptacle mince, ténace, résupiné-réfléchi, dimidié ou attenué en stipe . . .. Très souvent des cystides hyalines, épaisses, rugueuses, abondantes surtout à la pointe des aiguillons. . . ." (p. 116). *Hydnum denticulatum* was not mentioned as an example under either *Odontia* or *Mycoleptodon:* it may be assumed that it was reduced to the synonymy of one of the species of the latter genus. This conclusion necessitates reconsidering the choice of *H. denticulatum,* because it was indicated as type species at a later date. If it would agree better than the other original species with the generic description, it would have to be retained; if not, the selection of another species, for instance *Odontia junquillea,* would be indicated. After a carefully study of the generic description of *Odontina* and especially after comparing it with that of *Mycoleptodon,* I feel bound to assume that *Hydnum denticulatum* indeed stood foremost in Patouillard's mind when he published *Odontina,* and I therefore prefer to maintain that species as the type. — Variant spelling: "*Odontinia*": Banker *in* Bull. Torrey bot. Cl. **29** : 445, 448. 1902. — Typonyms: *Steccherinum* S. F. Gray (1821), *Leptodon* Quél. (1886; preoccupied), and *Mycoleptodon* Pat. (1897).

Odontinia.—See *Odontina.*

Odontiochaete J. Rick *in* Ann. mycol. **38** : 60. 1940. — Etymology: The genus *Odontia; χαίτη,* hair. Gender; f. — Type species (only original species): *Odontiochaete alba* J. Rick ("*album*").

O d o n t i u m Rafin. *in* Amer. monthly Mag. **1** : 429.1817 (devalidated name). — An isonym

[46]) Italics as in the original.

[47]) *Odontia* "(Fr.)" as defined by Patouillard in 1887 is identical with the genus now called *Caldesiella* Sacc. When in 1900 he accepted the latter name, he applied *Odontia* in a different sense.

of *Hydnum* sect. *Odontia* (Pers.) Pers. (Syn. Fung. 530. 1801) = *Odontia* Pers. (*in* Neues Mag. Bot. **1** : 110. 1794 = Tent. 30. 1797). In a review of Eaton's "Manual," Rafinesque (*l.c.*) remarked with regard to the resupinate *Hydnum chrysorhizon* Eaton (Man. 140. 1817): "It must belong to the genus *Odontium* of Rafinesque: *Odontia* section of Persoon." Thus, *Odontium* Rafin. was a new generic name established through a reference to, and hence fully identical with, Persoon's group of 1801, and accordingly the type species should be the same: *Odontia ferruginea* Pers. = *Caldesiella ferruginosa* (Fr.) Sacc.; see *Odontia* Pers. ex Banker, under *Odontia* S. F. Gray. — Typonyms: *Hydnopsis* (J. Schroet.) Rea (1909), *Odontia* Pers. ex Banker (1929; preoccupied), and *Caldesiella* Sacc. (1877); compare *Phaeodon* J. Schroet. (1888).

Oxydontia L. W. Miller *in* Mycologia **25** : 294. 1933. — Etymology: *ὀξύς*, sharp; *ὀδών*, *-όντος*, tooth. Gender: m. — Type species (by original designation): *Hydnum setosum* Pers. — Scope. Six Iowa representatives were definitely included. — Typonym: *Sarcodontia* S. Schulz. (1866).

Persooniana Britz.—See "Polyporaceae."

Phaeodon J. Schroet. *in* Cohn, Krypt.-Fl. Schles. **3** (1) : 458. 1888. — Etymology: *φαιός*, dusky; *ὀδών*, tooth. Gender: m. — Type species (selected): *Hydnum suaveolens* Scop. ex Fr., but perhaps the earlier selected *Hydnum tomentosum* Schrad. sensu J. Schroet. will have to be maintained. — Scope. The genus was divided into three taxa: (i) section *Hydnopsis* J. Schroet., with one species, *Hydnum tomentosum* Schrad. = *Caldesiella ferruginosa* (Fr.) Sacc.; (ii) section *Calodon* (P. Karst.) J. Schroet., of which six species were dealt with; and (iii) section *Sarcodon* (P. Karst.) J. Schroet., with one species, *Hydnum imbricatum* L. ex Fr. — Typification. The number of eligible species is three, viz, the types of the three sectional names; they are: (i) '*Hydnum tomentosum*' (only species), (ii) *H. suaveolens*, selected for the basinym *Calodon* P. Karst., q.v., and (iii) *H. imbricatum*, selected for the basinym *Sarcodon* P. Karst., q.v. It is not difficult to defend that a reasonable choice is either species (ii) as the representative of the largest group included, or species (iii) as the one popularly best known and moreover highly esteemed as an edible fungus. I venture to select *H. suaveolens*. — Banker (*in* Bull. Torrey bot. Cl. **29** : 445, 448. 1902) regarded Schroeter's first species, '*Hydnum tomentosum*,' as the type. [At a later date *Phaeodon* sect. *Hydnopsis*, of which it is the only species, was raised to generic rank: *Hydnopsis* (J. Schroet.) Rea, q.v.] — Typonyms: *Hydnellum* P. Karst. (1879) and *Calodon* P. Karst. (1881). In case '*Hydnum tomentosum*' were to be maintained as type species: *Odontium* Rafin. (1817; devalidated name), *Caldesiella* Sacc. (1877); *Hydnopsis* (J. Schroet.) Rea (1909), *Odontia* Pers. ex Banker (1929; preoccupied), compare *Phaeodon* J. Schroet. (1888).

Phaeohydnochaete "McGinty": Lloyd, Mycol. Writ. **4** (Lett. 61) : 7. 1916; **4** : 561. 1916 (as *Pheaohydnochaete*) (not validly published); see also Stevenson & Cash *in* Bull. Lloyd Libr. No. 35 : 73. 1936. — Introduced in connection with *Hydnochaete ferruginea* J. Rick (known to Lloyd from literature only). — For some general remarks on the McGinty names see Part I of the present series (Donk *in* Reinwardtia **1** : 205. 1951).

Phaeoradulum Pat. *in* Bull. Soc. mycol. France **16** : 178. 1900; Essai taxon. Hym. 69. 1900. — Etymology: *φαιός*, dusky; the genus *Radulum*. Gender: n. — Type species (only original species): *Phaeoradulum guadelupense* Pat.

Phellodon P. Karst. *in* Rev. mycol. **3** (No. 9) : 19. 1881; *in* Medd. Soc. Fauna Fl. fenn. **6** : 15. 1881.[48]) — Etymology: *φελλός*, kork; *ὀδών*, tooth. Gender: m. — Type species (selected): *Hydnum nigrum* Fr. — Scope. Introduced for *Hydnum* trib. *Mesopus* sect. *Lignosa* Fr. group *** Aculeis immutabilis et sporis albidis (Fries, Hym. europ. 605. 1874), although this was not especially stated. Three Finnish species were mentioned, the first being *Hydnum nigrum*. — Typification. *Hydnum nigrum* was considered to be the type species by Banker (*in* Bull. Torrey bot. Cl. **29** : 444, 448. 1902); Donk (Rev. niederl. Homob.-Aphyll. **2** : 46. 1933) selected the same species.

Phlebia Fr.—See "Thelephoraceae."

Phlebiella P. Karst.—See "Thelephoraceae."

Phlebriella.—See *Phlebiella*.

Pleurodon P. Karst. *in* Rev. mycol. **3** (No. 9) : 20. 1881; *in* Medd. Soc. Fauna Fl. fenn. **6** : 16. 1881. — Etymology: *πλευρά*, side; *ὀδών*, tooth. Gender: m. — Type species

[48]) The citation of "Soc. Fauna Fl. Fenn. Med. **5** : 41. 1879" by W. B. Cooke (Gen. Homobas. 73. 1953) is an error.

(same as of basinym): *Hydnum auriscalpium* L. ex Fr. — Basinym: *Auriscalpium* P. Karst. (1879; typonymous homonym of *Auriscalpium* S. F. Gray, q.v.) — Protonym: *Pleurodon* Quél. *apud* Cooke & Quél., Clav. Hym. 196. 1878 (not validly published).—See under *Calodon*. — Scope. When validly published by Karsten, only one (Finnish) species, *H. auriscalpium*, was mentioned. — Remarks. As already stated under *Calodon*, Karsten replaced *Auriscalpium* P. Karst. by *Pleurodon* Quél. and in doing this he at the same time validly published the latter name. It is accordingly interpreted here as a mere isonym of *Auriscalpium*, and for this reason I regard *H. auriscalpium* as the type species; it was already listed as such by W. B. Cooke (Gen. Homobas. 76. 1953). — When Banker (*in* Bull. Torrey bot. Cl. **29** : 443, 448. 1902) still ascribed the valid publication of the name to Quélet (1878), he considered Quélet's first species, *Hydnum occidentale* Paul. to be the type.

[*P r i a p u s* Rafin. *in* Medic. Repos., New York, 2nd. Hex., **3** : 423. 1806 (nomen nudum); **5** : 355. 1808 [French translation of description *in* J. Bot. (red. Soc. Bot.), Paris **2** : 176. 1809]. — Type species (only original species): *Priapus niveus* Rafin. — This generic name was listed as a synonym of *Hydnum L. (Bidona* Adans.) by Endlicher (Gen. Pl. 39. 1836), evidently by error. The current disposition, as a name given to some species of Phallaceae, is not likely either. Like in the case of *Cerophora* Rafin. I would rather suggest *Lycoperdon* Pers.]

Pseudohydnum J. Rick *in* Ann. mycol. **2** : 409. 1904. — Etymology: ψευδής, false; the genus *Hydnum*. Gender: n. — Type species (only original species): *Pseudohydnum guepinioides* J. Rick.—Distributed by J. Rick, Exs. Fung. austro-amer. Fasc. 1 : no. 16. A synonym of *Hydnum thelephorum* Lév. = *Hydnodon thelephorum* (Lév.) Banker. — Valid publication. Descriptio generico-specifica. — Homonym: *Pseudohydnum* P. Karst. (1868; Tremellaceae). — Typonym: *Hydnodon* Banker (1913). — Status. Impriorable on account of the earlier homonym.

Pycnodon Underw.—See "Thelephoraceae."

Radulochaete J. Rick *in* Ann. mycol. **38** : 58. 1940 — Etymology: the genus *Radulum;* χαίτη, hair. Gender: f. — Type species (only original species): *Radulochaete ceracea* J. Rick ("*ceraceum*").

[*R a d u l u m* Fr., Syst. Orb. veg. 81. 1825[49]); Elench. **1** : 148. 1828. — Type species (selected): *Radulum aterrimum* Fr. = *Eutypa hydnoidea* (Fr.) Höhn. (Sphaeriales, Pyrenomycetes).

Scope. The original description runs as follows:—

> "*Radulum*. . . . Hymenium interruptum, hinc inde tuberculosum.
>
> "Transitus ad *Thelephoras;* primam speciem proprii generis typum jam censent acutissimi Albertini et Schweinitz. Tubercula elongata, apice saepius sterilia. H.l. *Hydnum pendulum, H. radula (Radulum orbiculare), H. aterrimum, Thelephora hydnoidea* S.M."—Fries (*l.c.*, 1825).

In 1828, when treating it more fully, Fries (*l.c.*) divided the genus into two sections: (i) '*Hydnoidea,*' including *Radulum pendulum* Fr., *R. orbiculare* Fr. (= *Hydnum radula* Fr.), and, with a point of interrogation, *R. molare* (Chaill.) ex Fr., and (ii) '*Genuina,*' including *R. fagineum* ("Pers." ex Fr.) Fr., *R. laetum* Fr., *R. botrytes* Fr., *R. glossoides* (Pers.) ex Fr., and *R. aterrimum* (Fr.) Fr. Another important event in the history of the genus was when Fries (Gen. Hym. 13. 1836) explicitly indicated *R. aterrimum* as the type species of the generic name.

Typification. The clause in the original publication, "primam speciem proprii generis typum jam censent acutissimi Albertini et Schweinitz," at once directs attention to the first of the species mentioned, viz "*Hydnum pendulum.*" One would, of course, not hesitate to identify it with *Hydnum pendulum* (A. & S.) ex Fr. (1821) = *Sistotrema pendulum* A. & S. (Consp. Fung. nisk. 261. 1805), especially if one further realizes that Von Albertini & De Schweinitz, when describing their new fungus, comment upon it as worthy of generic separation. However, there are several factors to mistrust this identification. First, a few years later, *Sistotrema pendulum* was referred by Fries to an other genus, viz. *Irpex* Fr., and that species answers the description of *Irpex* rather better than it does that of *Radulum*. (*Irpex* was proposed at the same time, even on the same page, as *Radulum!*) Secondly, when treating the species of *Radulum* more fully in his subsequent work, Fries included a quite different fungus, but with the same specific epithet, *Radulum pendulum* Fr. This makes the

[49]) See also page 362.

quoted passage of the original description with the reference to Von Albertini & De Schweinitz very puzzling—it is probably due to an error. If this solution, to be defended below, would be acceptable, the spotlight on "*Hydnum pendulum*" (whichever species this indication may represent) would be switched off, and that species would become merely the first species. In this connection it may be remembered that in 1828 Fries did not class *Radulum pendulum* (presumably = "*Hydnum pendulum*" of 1825) among '*Genuina*' of *Radulum*, but in the less typical group '*Hydnoidea*.' It was "*Hydnum pendulum*" as identified with *Sistotrema pendulum* A. & S. that was taken as the type species of *Radulum* by Banker (*in* Bull. Torrey bot. Cl. **29** : 440. 1902) on the base of the first-species rule. [50])

A second species calls for attention as a candidate for the type. When introducing *Radulum*, Fries coined a generic name calling to mind the specific epithet of *Hydnum radula* which itself was re-christened *Radulum orbiculare*. It was suggested as the type species by Clements & Shear (Gen. Fungi 346. 1931) and accepted as such by Miller & Boyle [*in* Stud. nat. Hist. Univ. Iowa **18** (2) : 16. 1943]. This species, too, did not belong to the '*Genuina*.'

Finally, any attempt at selecting a type species will have to consider *Hydnum aterrimum*. It is among the original species of 1825; its belongs to '*Genuina*' of 1828; and it was expressly indicated as the type by Fries himself in 1836! Surprisingly enough nobody seems to have followed Fries, the author of the genus.

The list of candidate type species is thus composed of three names: (i) "*Hydnum pendulum*" of 1825, whatever that species may represent, (ii) *Radulum orbiculare*, and (iii) *Hydnum aterrimum*. Before a definite selection be made, it must be settled whether or not "*Hydnum pendulum*" was emphasized by error in the original description. See first under *Irpex*.

With regard to the presence of "*Hydnum pendulum*" in the original publication of *Radulum* three explanations may be taken into consideration:

(a) The clause "primam speciem . . ." as well as the name "*Hydnum pendulum*" were both incorporated by error; they were intended as part of the description of *Irpex* on the same page. This assumption does not satisfactorily account for the existence of *Radulum pendulum*, a different species from *Hydnum pendulum* (A. & S.) ex Fr., and shortly afterwards described by Fries in *Radulum*. [51])

(b) In 1825 it was indeed Fries's intention to introduce a genus *Radulum* with *Hydnum pendulum* (A. & S.) ex Fr. as type. Shortly afterwards he changed his mind, and in 1828 he transferred that species to *Irpex* at the same time treating it as the type of the latter genus, which, therefore, has been based in 1825 on a different species. With the removal of *Hydnum pendulum* (A. & S.) ex Fr. from *Radulum*, he filled up the gap by describing a new species, *Radulum pendulum* Fr. This supposition has superficially much to recommend itself. However, at closer consideration it is rather easy to dispose of *Hydnum pendulum* (A. & S.) ex Fr. as the type species of *Radulum* 1825, because its teeth are flattened (the reason why Von Albertini & De Schweinitz placed it in *Sistotrema*). Fries would never have included it in *Radulum*, for the generic description of 1825 calls for a hymenium "interruptum, hinc inde tuberculosum"! (He himself already had collected *H. pendulum* A. & S. before 1821!)

(c) When establishing *Radulum*, Fries had his own *R. pendulum* already in hand, at first calling it *Hydnum pendulum*, and had

---

[50]) Banker considered *Radulum* Fr. 1825 based on "*Hydnum pendulum* (= *Sistotrema pendulum* Alb. & Schw.) with three other species," thus indicating the first species as type. He continued:—

> "That the species, simply named as *Hydnum pendulum* by Fries, in this instance is really *Sistotrema pendulum* of Albertini and Schweinitz is made unquestionably evident by a comparison of the text in Systema Orbis Vegetabilis, 81, with the text in the Conspectus Fungorum, 261. Fries himself always cited the Elenchus Fungorum, 149. 1828, as the place where he established the genus. But this must be regarded as a different genus having the same name, for, curiously enough, in the latter work, he describes a totally different species and evidently a new one under the name of pendulum."—Banker (*l.c.*).

See also under *Tylodon*.

[51]) In "Systema orbis vegetabilis" as a rule no new species were described, although quite a number were mentioned. They were to be validly published in Fries's "Elenchus."

decided to incorporate it in that genus. By error, due to the identical epithets of *R. pendulum* and *Hydnum pendulum* (A. & S.) ex Fr., he inserted the clause "primam speciem . . ." with the description of *Radulum,* instead of with that of *Irpex* (on the same page). A moment of inattention and nothing else. It is this conjecture that seems to be the most acceptable one. It does agree with usage which does not doubt that *Radulum pendulum* was one of the original species of *Radulum,* and *Hydnum pendulum* (A. & S.) ex Fr. one of them of *Irpex.*

Conclusion. The clause "primam speciem . . ." in the original publication of *Radulum* should be struck out and transferred to the original publication of *Irpex* on the same page. With "*Hydnum pendulum*" the species *Radulum pendulum* Fr. was intended and not *Hydnum pendulum* (A. & S.) ex Fr.

When accepting this conclusion, one is induced to appreciate *Radulum pendulum* merely as one of the species mentioned in the original description and as nothing else, although it is the first one. It was by error unduly emphasized. Thus, the claims for recognition of the three candidate type species of *Radulum* become,

(1) for *Hydnum aterrimum* Fr.: classed in *'Genuina'* in 1828; and indicated in 1836 by Fries himself as the type species;

(2) for *Hydnum radula* Fr.: its specific epithet coincides (slightly modified) with the generic name; it was chosen as the type species in 1931; however, it was not classed in *'Genuina'* in 1828; compare also Fries's remark (Elench. **1** : 148) at the end of the observation to *Radulum:* "Unica tantum species *(R. orbiculare)* aberrans est"!;

(3) for *Sistotrema pendulum* A. & S.: regarded as type in 1902; but excluded by Fries himself in 1828; and it must be doubted whether it was really ever included among the original species of 1825. (The fact that, if mentioned at all, it was the first species, has not much weight under the present Code.)

When we consider it proven that in 1825 none of the species was singled out as type by *original* designation, one is, I believe, bound to select *H. aterrimum,* since it was the first species to be indicated as the type, and by the author of the genus himself at that.

Homonym. *Radula* Dum. (1822; Hepaticae) is not to be regarded as an earlier homonym. — Isonym. Compare *Tylodon* Banker. — Status. *Radulum* is priorable, and seems to be the correct name for the ascomycetous genus now called *Eutypa* Tul., or, rather, for the monotypic segregate of the latter genus, *Xenotypa* Petrak (*in* Sydowia **9** : 497-500. 1955).]

Ricnophora Pers.—See "Thelephoraceae."

Sarcodon P. Karst. *in* Rev. mycol. **3** (No. 9) : 20. 1881; *in* Medd. Soc. Faun. Fl. fenn. **6** : 16. 1881. — Etymology: *σάρξ, σαρκός,* flesh; *ὀδών,* tooth. Gender: m. — Type species (selected): *Hydnum imbricatum* L. ex Fr. — Protonym: *Sarcodon* Quél. *apud* Cooke & Quél., Clav. Hym. 195. 1878 (not validly published).—See under *Calodon.* Quélet included both *Hydnum repandum* L. ex Fr. and *H. imbricatum* among the fleshy, stipitate species for which he introduced this name. — Scope. When Karsten took up the name and validly published it, he excluded the *Hydnum repandum* group. — Typification. The undisputed selected type species is *Hydnum imbricatum,* indicated by Banker (*in* Bull. Torrey bot. Cl. **29** : 442, 448. 1902; for *Sarcodon* Quél. 1878) and accepted by subsequent authors, Banker (*in* Mem. Torrey bot. Cl. **12** : 103. 1906) and Donk (Rev. niederl. Homob.-Aphyll. **2** : 59. 1933), for the name as re-published by Karsten.

Sarcodontia S. Schulz. *in* S. Schulz., Kanitz, & Knapp *in* Verh. zool.-bot. Ges. Wien **16** (Abhandl.): 41. 1866. — Etymology: *σάρξ, σαρκός,* meat; the genus *Odontia.* Gender: f. —Type species (only original species): *Sarcodontia mali* S. Schulz.—Later on Schulzer von Müggenburg [*in* Verh. zool.-bot. Ges. Wien **24** (Abhandl.): 293. 1874] described this species more fully under the name of "*Kneiffia setigera* Fr. *β pomicola* Schulzer, olim *Sarcodontia Mali* mihi." Accepting this redescription as applying to the same species on which the genus was based, the type of *Sarcodontia* represents *Hydnum setosum* Pers.; compare Donk (*in* Mycologia **44** : 262-263. 1952). — Valid publication. As follows:

> "*Sarcodontia* Schulzer, *Kneiffia* Fr. Form b. Stroma d i c k, f l e i s c h i g formlos, auf der ganzen Oberfläche mit ungleichförmigen Zacken besetzt. Gehört weder habituell noch der Substanz nach zu den Telephorei, sondern hieher [Hydnei?].
>
> "295. *S. Mali.* Vinkovce an kranken (veredelten) Aepfeln."—S. Schulzer (*l.c.*).

Typonym: *Oxydontia* L. W. Miller (1933).

Sclerodon P. Karst. *in* Bidr. Känn. Finl. Nat. Folk **48** : 348, 360. 1889. — Etymology: *σκληρός*, tough; *ὀδών*, tooth. Gender: m. — Type species (same as of basinym; only species of isonym): *Hydnum strigosum* Sw. ex Fr. — Basinym: *Gloiodon* P. Karst. (1879), q.v.—*Sclerodon* is here regarded as a mere name change. — Valid publication. There is a reference to *Gloidon* P. Karst. (p. 360) and a description as part of a key will be found on page 348. The only species treated is the selected type of *Gloiodon*. — Remark. Karsten's reasons for coining a new name were not made clear. — Typonym: *Leaia* Banker (1906).

Scopuloides (Mass.) Höhn. & L.—See "Thelephoraceae."

Sistotrema Pers.—See "Polyporaceae."

Sistotrema Fr.—See "Polyporaceae."

Sistotrema S. F. Gray.—See "Polyporaceae."

Somion Adans.—See "Polyporaceae."

Spathulina Pat.—See "Polyporaceae."

Steccherinum S. F. Gray, Nat. Arrang. Brit. Pl. **1** : 597 ("*Stecherina*"), 651. 1821. — Etymology: steccherino, an Italian word derived from stecco, thorn. Gender: n. — Type species (selected): *Hydnum ochraceum* Pers. — Scope. Introduced with three species: (i) *Hydnum ochraceum*, (ii) *H. gelatinosum* Jacq. = *Tremellodon gelatinosum* (Jacq. ex Fr.) Fr., and (iii) *Steccherinum quercinum* S. F. Gray = *Hydnum erinaceus* Bull. = *Hericium erinaceus* (Bull. ex Fr.) Pers. — Typification. The first species has been considered to be the type; it was indicated as such by Banker (*in* Bull. Torrey bot. Cl. **29** : 448. 1902; *in* Mem. Torrey bot. Cl. **12** : 124. 1912; *in* Mycologia **4** : 309. 1912) and accepted by Miller (*in* Mycologia **25** : 297. 1933), by Miller & Boyle [*in* Stud. nat. Hist. Univ. Iowa **18** (2) : 45. 1943], and Donk (*in* Bull. bot. Gdns Buitenzorg III **18** : 100. 1949). — Remark. Gray cited "Mich." as the author of the name. One will find 'steccherino' mentioned as part of vernacular, Italian denominations (not as scientific ones!) under eight (out of ten) of Micheli's species of *Erinaceus* Dill. (Micheli, Nova Pl. Gen. 132-133. 1729); none of them represents a species included by Gray under his *Steccherinum* — Variant spelling: "*Stecherina*": S. F. Gray, *op. cit.* p. 597.—Used in a key and apparently an error. — Typonym: *Leptodon* Quél. (1886; preoccupied) and *Mycoleptodon* Pat. (1900).

Stecherina.—See *Steccherinum*.

Thelephora Ehrh. ex Fr.—See "Thelephoraceae."

Thwaitesiella Mass.—See "Thelephoraceae."

T y l o d o n Banker *in* Bull. Torrey bot. Cl. **29** : 440. 1902 (nomen nudum?). — Type species (by original designation): "*Radulum pendulum* Fries, Elenchus Fungorum, 149. 1828; not *Radulum pendulum* Fries, Syst. Orb. Veg. 81. 1825" [52]) = *Tylodon friesii* Banker. —This is conspecific with *Corticium subcostatum* (P. Karst.) Bourd. & G. — Banker (see also *op. cit.* p. 448) introduced this name for "*Radulum* Fr. 1830," by which indication is meant the name as it appears in Fries's "Elenchus Fungorum," 1828. As discussed under *Irpex* and *Radulum*, Banker considered *Radulum* Fr. 1825 as based on *Sistotrema pendulum* A. & S. "Fries himself always cites the Elenchus Fungorum, 149. 1828, as the place where he established the genus. But this must be regarded as a different genus having the same name, for, curiously enough, in the latter work, he describes a totally different [first!] species and evidently a new one under the name of *pendulum*." — *Radulum pendulum* Fr. 1828, the species which Banker has designated as the type of his new name *Tylodon*, can neither be accepted as the type of *Radulum* Fr. 1825, q.v., nor of Fries's application of 1828 of that generic name. This latter use does, emphatically, not represent a new but homonymous name; moreover, it has a different type species from *Tylodon*. In my opinion, Banker's reference to the generic description is not valid, and, therefore, must be deleted, as it is to a description based on a different type from the one he designated for his new name. This conclusion may appear not generally acceptable; it is here given for further consideration.

Tyrodon P. Karst. in Rev. mycol. **3** (No. 9): 19. 1881; *in* Medd. Soc. Fauna Fl. fenn. **6** : 15. 1881. — Etymology: *τυρός*, cheese; *ὀδών*, tooth. Gender: m. — Type species (only original species [53]): *Hydnum repandum* L. ex

[52]) See for this species under *Irpex*.

[53]) Banker (*in* Bull. Torrey bot. Cl. **29** : 444. 1902) stated that "the genus was founded on *Hydnum repandum* L. and *H. rufescens* Pers." This is not correct: in the "Revue mycologique" one finds mentioned "*T. repandus* (Linn.) . . ..—F. *rufescens*

Fr. — Variant spelling: "*Tyroden*": *in* Rev. mycol. **5** : 127. 1883.—An error of printing. —Typonyms: *Erinaceus* Dill. (1719; pre-Linnean), *Bidona* Adans. (1763; devalidated name), *Echinus* Haller (1768; devalidated name), *Hydnum* L. ex Fr. (1821), *Dentinum* S. F. Gray (1821), and *Hypothele* Paul. ex Banker (1904; not validly published).

Tuberculinia Velen., České Houby 734. 1922 (nomen provisorium). — In an observation to the description of *Grandinia ceracea* Velen., the author remarked: "Probaliter fungus hic genus proprium repraesentat (*Tuberculinia* Vel.), quod a *Grandiniis* carposomate ceraceo-carnoso, superficie haud levi et mycelio mucedineo, arachnoideo discrepat."—Translation from the Czech by Pilát (Velen. Sp. nov. Bas. 269. 1948). — Not *Tuberculina* Sacc. (1880; n.v.; Moniales, Deuteromycetes).

Vararia P. Karst.—See "Thelephoraceae."

Xylodon (Pers.) *ex* S. F. Gray, Nat. Arrang. Brit. Pl. **1** : 649. 1821. — Etymology: *ξύλον*, wood; *ὀδών*, tooth. Gender: m.

Type species (selected): *Sistotrema quercinum* (Pers.) Pers.

The question, which species Persoon called *Odontia quercina* Pers. (Obs. mycol. **2** : 17. 1799), is of importance because its answer determines the application of the generic name *Xylodon* (Pers.) ex S. F. Gray, of which it is the (selected) type species. I have long hesitated before making up my mind and I am not quite satisfied with the conclusion reached below, although I shall act in accordance with it.

> Persoon's fungus must be, one may assume from the start, one of three species, all excellently described by Bourdot & Galzin (Hym. France 403-405. 1928), viz, (i) *Radulum membranaceum* (Bull. sensu Bres.) Bres = *R. molare* (Chaill.) ex Fr. (not *Sistotrema molariforme* Pers., which is *R. radula*); (ii) *Radulum orbiculare* Fr. = *R. radula* (Fr.) Nannf.; and (iii) "*Radulum quercinum* Fr., Hym. p. 623" = *R. quercinum* (Fr., non Pers.) Fr. sensu Bres. In the next lines these species will be indicated as *R. molare*, *R. radula*, and *R. quercinum* respectively. [54]) That great caution is required in distinguishing between these species without microscopical examination of the spores, will become apparent from the note attached by Bourdot & Galzin to their generic description, and to which the reader is referred.

I searched in vain in Persoon's herbarium for a specimen that could be interpreted as the type of *Odontia quercina*. There are three specimens left which Persoon brought into relation with it, but none was definitely attributed to it. One is labelled "*Sistotrema quercinum* ? *Hydnum membranaceum* Bull." (L 910.270-474). Bourdot wrote about it to me: "*Radulum membranaceum* sensu Bres. [*R. molare*]. J'ai trouvé une partie d'hyménium très nette, avec assez nombreuses spores. — Hyphes 3—4 μ avec boucles très rares; basides 40—45 (—50?) x 7,5—9 μ; spores (7,5—) 10—11 x (5—) 6—7,5 μ."

The second specimen is labelled "*Sistotrema quercina* ?" (L 910.270-470). I did not venture to identify it, and neither did Bourdot: "Pour moi indéterminé. Pas de spores; basides paraissent plus étroites que dans *Radulum membranaceum* Bres. [*R. molare*]. Hyphes plus fines 1—3 μ; beaucoup d'oxalate. Ces caractères indiqueraient plutôt *R. orbiculare* [*R. radula*] que *R. membranaceum* Bres. ou *quercinum* Bres. [*R quercinum*]. Mais ?"

The label of the third specimen reads, "*Hydnum membranaceum* Bull.? *Sistotrema quercinum* Syn. fung. 552 *Hydnum heteromallum*. Gallia" (L 910.270-692). The country indicates that this is not the type, for *Odontia quercina* was described when Persoon lived in Germany; this conclusion is supported by the fact that Persoon was inclined to consider it a distinct species ("*Hydnum heteromallum*"). This collection I determined as

---

(Pers.) . . ., "the 'F.' apparently standing for 'T.' = *Tyrodon* rather than for 'forma,' but in any case the second name is not preceded by the number 2, which indicates that only one species was included. In Karsten's other publication of 1881 *T. rufescens* is marked with an asterisk, denoting a subspecies. For a comparable case, see *Dryodon*.

[54]) The generic name *Radulum*, q.v., is untenable for a taxon of Hymenomycetes because the type species is an ascomycete (*Hydnum aterrimum* Fr.) and the genus a heterogeneous assortment of not closely related species to be distributed over several genera.

"voisin de *Hydnum argutum* [sensu] Bres." and Bourdot was of the same opinion, "Je crois aussi *Odontia arguta* sensu Bres." Thus, the consultation of Persoon's herbarium did not yield any definite result.

When Fries (Syst. mycol. **1** : 423. 1821) re-published *Odontia quercina* (= *Sistotrema quercinum*) as *Hydnum quercinum*, he gave a description based on his own collections. It is now generally assumed that he dealt with a different species, which is now interpreted according to Bresadola (*in* Atti Accad. Agiati III **3** : 103. 1897): for a description, see Bourdot & Galzin (*l.c.*).

The prevailing opinion during the last half century seems to have been hat Persoon's fungus is identical with *R. molare*. For instance, what Lloyd [Mycol. Writ. **5** (Rad.): 6 *fs.* 970-972. 1917] called, and illustrated as, '*Radulum quercinum*' of Persoon certainly is this species. Bourdot & Galzin (*op. cit.*, index, p. 744) identified the Persoonian plant in the same way (as *R. membranaceum*). A careful reading of the original description calls to mind rather *R. molare*, and to a less degree *R. radula* but hardly *R. quercinum*, with which Fries confused it (at least from 1838 onwards). It is of interest to find that Persoon's labels prove that he never associated specimens of the latter two species (which he described under several names) with his *Odontia quercina*. My conclusion is that for all practical purposes we are entitled to identify *O. quercina* with *R. molare*.

DEVALIDATED BASINYM: *Sistotrema* sect. "*** Resupinata effusa, dentibus difformibus subincisis (*Xylodon*)" Pers., Syn. Fung. 552. 1801.—Persoon included six species (and one doubtfully referred here), in this order: *Sistotrema quercinum*, *S. fagineum* Pers., *S. cerasi* (Pers.) Pers., *S. digitatum* Pers. (basinym, *Hydnum paradoxum* Schrad.), *S. spathulatum* (Schrad.) Pers., and *S. cellare* Pers. Of these the first may well be regarded as the type species because of the observation added to it when Persoon described it for the first time as *Odontia quercina* Pers. (Obs. mycol. 2 : 17. 1799); in this observation Persoon envisaged for this species and *Odontia cerasi* Pers. a new group which he considered intermediate between *Poria* Pers. and *Odontia* Pers., a group for which he did not yet propose a name, but which he would rather include in *Sistotrema* Pers. — SCOPE. Gray, who acknowledged Persoon's authorship, was the first to raise Persoon's section to generic rank. His species are *S. quercinum* and *S. digitatum*, this low number being due to the fact that he had no other species to report from the British Isles. The circumscription of the taxon remained unaltered. — TYPIFICATION. Both species of Gray are among Persoon's original set, and this makes it possible to select Persoon's leading species as the type, too, of the generic name. This species, Gray's first one, was already indicated as such by Banker (*in* Bull. Torrey bot. Cl. **29** : 439, 448. 1902). — REMARK. In my opinion the type species of *Odontia* S. F. Gray and *Xylodon* (Pers.) ex S. F. Gray belong to the same genus, at least if they are to be identified with *Radulum quercinum* (Fr.) Fr. and *R. molare* (Chaill.) ex Fr. respectively, as I assume that they ought to be. Because the two generic names were simultaneously published, I herewith reduce *Xylodon* to the synonymy of *Odontia* in an attempt to retain the latter name. — MONADELPHOUS HOMONYM (i) *Xylodon* (Pers.) *ex* Chev., Fl. gén. Env. Paris **1** : 272. 1826. [56])—This is Persoon's section for the second time, and independently of Gray, raised to generic rank. Chevallier somewhat altered the limits to accommodate the resupinate members of *Hydnum* L. ex Fr. as it appeared in Fries's "Systema." Some of Persoon's original species were excluded and a few resupinate members of *Hydnum* added to the original Persoonian group which re-appeared as "*Xylodon* **a. Aculeis compressis, albis." This group contained, e.g. *Sistotrema fagineum*, *S. quercinum*, selected type species of *Xylodon* (Pers.) ex S. F. Gray, and *Hydnum paradoxum* Schrad. ex Fr. (*S. digitatum*). Chevallier's first species is a true mixtum compositum (*Hydnum membranaceum* "Bull." ex Fr.). Chevallier's name may be accepted as having the same type as *Xylodon* (Pers.) ex S. F. Gray, which makes it a typonymous homonym. — (ii) *Xylodon* "Ehrenb." ex P. Karst. *in* Acta Soc. Fauna Fl. fenn. **2** (1) : 31. 1881.—When Karsten introduced this name in 1881 he mentioned two examples: *Irpex paradoxus* (Schrad. ex Fr.) Fr. (first species) and *Irpex*

[56]) When still ascribing the generic name *Xylodon* to Chevallier instead of S. F. Gray, I had selected a different species (not mentioned by name) from the one mentioned above for Gray's name. This remark to explain foot-note 60 in a previous publication (Donk *in* Bull. bot. Gdns Buitenzorg III **17** : 192. 1941).

obliquus (Schrad. ex Fr.) Fr. The former species is the one for which Persoon coined a new name (*Sistotrema digitatum*); it is now often interpreted as a mere form of *Poria versiporus* (Pers.) Romell. It may be pointed out that in the next year Karsten (*in* Bidr. Känn. Finl. Nat. Folk **37** : 65. 1882) treated the genus more fully and included, besides the two original species already mentioned, also *Sistotrema candidum* Ehrenb., *Irpex spathulatus* (Schrad. ex Fr.) Fr., and *Irpex deformis* Fr. (*Hydnum pseudo-boletus* DC. ex Fr., Syst. mycol. **1** : 424. 1821). Karsten ascribed the name *Xylodon* to Ehrenberg (Sylv. mycol. berol. 33. 1818). That author never founded a genus of that name; he merely used "*Xylodon*" as a subdivisional epithet under *Sistotrema*, preceding the descriptions of three species (*Sistotrema carneum* Ehrenb., *S. fuscoviolaceum* Ehrenb., and *S. candidum* Ehrenb.). Although Ehrenberg did not refer to Persoon, there is no room for doubt that he applied Persoon's sectional epithet. The first author to list a name "*Xylodon* Ehrenb." was Endlicher (Gen. Pl. 39. 1836; Ench. bot. 21. 1841), who gave it as a synonym of *Irpex* Fr. Karsten's two species of 1881 do not correspond with any of Ehrenberg's, but one of his species is among Persoon's original lot. W. B. Cooke (Gen. Homobas. 100. 1953) listed *Irpex paradoxus* as the type species of *Xylodon* "Ehr. ex Karst." — "*Xylodon* Ehrenb. 1818 Sylv. myc. Berol. 30; . . ." was taken up by O. Kuntze [Rev. Gen. Pl. **3** (2) : 540. 1898] as the correct name for *Irpex* Fr. As already pointed out, Kuntze's statement that Persoon's sectional name was raised to generic status by Ehrenberg, is not correct; neither is his statement that Ehrenberg did so "mit der Art: *Xylodon candidus* Ehrb." It is clear that this species was implicitly regarded as the type of *Xylodon* "Ehrb." by Kuntze. — Bondarzew & Singer (*in* Ann. mycol. **39** : 49. 1941; *apud* Singer *in* Mycologia **36** : 66. 1944) took *Irpex paradoxus* as the type of *Xylodon* "Karst."

News and Notes

NOTICES OF BOOKS

Contributions to this column will be gratefully received by Mr. K. U. Kramer, Botanical Museum, Lange Nieuwstraat 106, Utrecht, Netherlands.

Flora of Senegal

J. Berhaut: Flore du Sénégal, Brousse et Jardins (Savanes de l'Afrique occidentale). Dakar, 1954. x + 300 pp., 10 coloured plates (photographs). (Artificial keys to species, accompanied by 27 explanatory drawings; includes native and introduced species).

Flora of Tropical East Africa

(edited by W. B. Turrill & E. Milne-Redhead)

J. H. Hemsley: *Connaraceae* (27 pp., 9 figs.)

W. B. Turrill: *Caryophyllaceae* (38 pp., 14 figs.)

B. Verdcourt: *Canellaceae* (4 pp., 1 fig.) (All Londen, 1956).

Flora Malesiana

Ser. I vol. 5 pt. 2 (Djakarta, 1956).

C. G. G. J. van Steenis: *Pentaphylacaceae* (pp. 125-145).

M. Jacobs: *Malpighiaceae* (pp. 125-145).

H. Sleumer: *Proteaceae* (pp. 147-206).

C. G. G. J. van Steenis: *Betulaceae* (pp. 207-208).

P. W. Leenhouts: *Burseraceae* (pp. 209-296).

Flora of Nevada

Contributions toward a flora of Nevada 39. D. B. Dunn: *Leguminosae* II. *Lupinus*. Beltsville, Md., 1956. 64 pp., 1 plate.

Flora of Belgium

Flore Générale de Belgique: Spermatophytes II (2); A. Lawalrée: 23. *Papaveraceae*, 24. *Fumariaceae*, 25. *Cruciferae* (in part). pp. 121-285, Bruxelles, 1956.

Flora of Leningrad

Flora Lyeningradsky oblasti (Flora of the Leningrad region), ed. by B. K. Shishkin.

Part I, edited by O. A. Muravyeva: Family key, Pteridophytes, Gymnosperms, Monocotyledones. University of Leningrad, 1955. 289 pp., 1 map; in Russian.

Flora of Poland

Flora Polska VII. *Parietales, Rosales*. Edited by W. Szafer & B. Pawlowski. Polska Aka-

demia Nauk, Kraków 1955. 302 pp., 52 figs.; in Polish.

Atlas Flory Polskiej i ziem ościennych (Florae Polonicae terrarumque adiacentium Iconographia), edited by J. Madalski.

I (1): *Ophioglossaceae, Osmundaceae, Polypodiaceae* (in part); plates 1-31.

I (2): *Polypodiaceae* (concl.), *Salviniaceae, Marsiliaceae, Equisetaceae, Lycopodiaceae, Selaginellaceae, Isoëtaceae;* plates 32-62.

I (3): *Taxaceae, Pinaceae, Cupressaceae, Ephedraceae;* plates 63-75; by T. Szynal, Polska Akademia Nauk, Warszawa-Wroclaw, 1954.

IX (1): *Papaveraceae*; plates 1017-1033, by F. Bialous, id., 1955. (Explanatory text in Polish and Latin).

Farinosae of El Salvador

O. Rohweder: Die Farinosae in der Vegetation von El Salvador. Universität Hamburg, Abhandlungen aus dem Gebiet der Auslandskunde Band 61 — Reihe C: Naturwissenschaften — Band 18. XVI + 197 pp., 36 plates. Hamburg, 1956. After an introduction with general data on the physiography, climate, and vegetation of El Salvador, the author gives an account of the *Bromeliaceae, Commelinaceae,* and *Pontederiaceae* of that country from a phytogeographical, ecological, and taxonomical viewpoint, including enumerations of species and keys to genera and species. The treatment of *Commelinaceae* includes a special study of the morphology and taxonomy of the tribe *Tradescantieae.* (Announcing cards can be obtained from the publishers, Messrs. Cram, De Gruyter & Co., Hamburg 1, Germany, or from the editor of this column).

Mosses of Fennoscandia

Illustrated Moss Flora of Fennoscandia. II. *Musci,* fasc. 2, by E. Nyholm. Lund, 1956, pp. 81-189, figs. 38-93.

Stereum of the Mississippi Valley

P. L. Lentz: *Stereum* and allied genera of Fungi in the Upper Mississippi Valley. U.S. Dept. of Agric. Monogr. 24, Washington, D.C., 1955. 74 pp., 16 plates; with keys, descriptions, data on habitat and distribution.

Monographs, revisions, etc., published in periodicals

S. Balle: A propos de la morphologie des "*Loranthus*" d'Afrique. Webbia XI: 541-585 (1956). (With a key to the new grouping of genera proposed in the paper).

O. Beccari † & R. E. G. Pichi-Sermolli: Subfamiliae Arecoidearum Palmae gerontogeae tribuum et generum conspectus. Ibid. 1-187 (1956). (With keys to and descriptions of genera, 47 figs.; in Latin and Italian).

N. L. Bor: The genus "*Digitaria*" Heist. in India and Burma. Ibid. 301-367 (1956). (With keys and descriptions; 2 plates).

G. Cufodontis: Enumeratio Plantarum Aethiopicae, *Spermatophyta.* Sequentia (3 and 4). Bull. Jard. Bot. Brux. XXV (2) Suppl.: 193-272; id. (3) Suppl.: 273-344 (1955).

E. Y. Dawson: A preliminary working key to the living species of *Dermatolithon.* Essays in the Nature Sciences in honor of Capt. Allen Hancock: 271-277 (Los Angeles, 1955).

G. P. DeWolf, Jr.: Notes on cultivated *Solanaceae.* 2. *Datura.* Baileya 4 (1): 12-23 (1956). (With key).

Id.: Notes on cultivated *Scrophulariaceae.* 1. *Alonsoa.* Ibid. 34-39 (1956). (With key).

A. Fernandes & M. A. Diniz: Contribucão para o conhecimento das *Lythraceae* da Guiné Portuguesa. Garcia de Orta, Rev. Junta Miss. Geograf. Investig. Ultramar III (2): 193-198 (1955). (An enumeration, with keys).

R. Heim: Les Lactaires d'Afrique intertropicale (Congo Belge et Afrique Noire Française). Bull. Jard. Bot. Brux. 25 (1): 1-91 (1955). (With 6 coloured plates, 37 figs., keys and descriptions.)

CONTENTS

Stafleu, F. A. — Nomenclatural conservation in the Phanerogams 85

Donk, M. A. — The generic Names proposed for Hymenomycetes — V, "Hydnaceae" (continuation) 95

News and Notes
Notices of Books 115

Contents 116

"Taxon" is directed by: Prof. J. Lanjouw, Chief Editor, and Dr F. A. Stafleu, Assistant Editor. All correspondence should be sent to the International Bureau for Plant Taxonomy and Nomenclature, 106 Lange Nieuwstraat, Utrecht — Netherlands.
All members of I.A.P.T. receive "Taxon" free of charge. Copies of personal members are for private use only and should not be placed in official libraries.